

---

The Parliament of the Commonwealth of Australia

# Review of the Rollout of the National Broadband Network

Third Report

Joint Committee on the National Broadband Network

June 2012  
Canberra

---

© Commonwealth of Australia 2012

ISBN 978-0-642-79623-3 (Printed version)

ISBN 978-0-642-79624-0 (HTML version)

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia License.



The details of this licence are available on the Creative Commons website:  
<http://creativecommons.org/licenses/by-nc-nd/3.0/au/>.

Cover image courtesy of *Thinkstock*



## Chair's Foreword

This month's announcements by Australia's two largest media outlets, Fairfax Media and News Limited, on the rapid ascent of their digital platforms, are important examples of how important the new wholesale broadband platform will be for Australia. This week's announcement by the National Library of Australia of its embrace of a greater digital platform is the latest example.

The National Broadband Network (NBN), over the coming decade, will deeply impact each and every one of us, either through the way we receive our news and information, the way we do business and communicate with clients and customers, or the way we manage our health and education.

Building anything other than the best wholesale platform is not acceptable. The speed and capacity of a 'gold standard' platform offers significant and obvious quantitative and qualitative benefits for consumers when compared to a 'copper-standard' platform. With an end sale also written into legislation, this asset is ultimately being built to be sold - so the better the build, the better the return to taxpayers.

The Joint Committee on the NBN assesses a range of issues in this Third Report that are relevant to this pursuit of the best possible build. Included in this report is consideration of an eight month delay, workforce issues, and performance compared to the soon to be updated NBN Co Corporate Plan.

So despite several performance issues being identified, the focus remains on the quality of the broadband asset we will construct, initially own, and from which we will derive significant economic benefit. We seek high quality, and therefore high consumer benefit, from our broadband assets - assets that are becoming as fundamental to our lives as housing or transport.

This Third Report raises a range of issues that I urge the Government and NBN Co to respond to in detail and in depth.

I thank all Committee Members for their commitment to this process in what is a hotly contested area of policy.

---

I particularly thank the Secretariat for their on-going work – they deserve credit for producing a quality Third Report.

Robert Oakeshott MP  
Chair



# Contents

Chair's Foreword .....	iii
Committee Membership .....	xi
Terms of Reference.....	xiii
List of Abbreviations .....	xv
Recommendations .....	xix

## REPORT

<b>1 Introduction .....</b>	<b>1</b>
Background .....	1
Committee's Role.....	2
Reporting Timetable .....	3
About the Review .....	4
Objectives and Scope .....	4
Conduct.....	5
Inspection.....	5
Report Outline .....	5
<b>2 Performance Reporting .....</b>	<b>7</b>
Background .....	7
Key Features of the Performance Report.....	8
Format and Content .....	8
Key Performance Indicators .....	9
<b>National Broadband Network Rollout Progress .....</b>	<b>14</b>
Progress over the Reporting Period .....	14
Current NBN Rollout Progress .....	18
NBN Co Limited Financial Result .....	19
Community Consultation.....	22

---

Background .....	22
Addressing the Information Gap.....	22
Public Engagement Activities .....	25
Ongoing Community and Industry Concern .....	28
<b>Additional Issues .....</b>	<b>30</b>
Delay of Answers to Questions on Notice .....	30
Timeframe for Receipt of Performance Report.....	31
<b>Concluding Comments .....</b>	<b>32</b>
<b>3 Regulatory and Pricing Issues.....</b>	<b>39</b>
<b>Introduction .....</b>	<b>39</b>
<b>Binding Definitive Agreements with Telstra and Optus.....</b>	<b>39</b>
Telstra Agreement.....	39
Telstra’s Structural Separation Undertaking and Draft Migration Plan .....	41
Timeframe for Completion.....	42
NBN Rollout Progress since Telstra Agreement Approval .....	42
Optus Agreement .....	43
Future Use of Remaining Copper Network.....	45
Other .....	46
<b>NBN Co’s Special Access Undertaking.....</b>	<b>47</b>
Update .....	47
Recourse to the Australian Competition and Consumer Commission.....	48
<b>Wholesale Broadband Agreement.....</b>	<b>51</b>
Term of Wholesale Broadband Agreement .....	51
Bundling and Pricing of Services.....	52
Consumer Protection .....	53
<b>Additional Matters.....</b>	<b>54</b>
Small Business e-Readiness.....	54
<b>Concluding Comments .....</b>	<b>57</b>
<b>4 Contracting .....</b>	<b>61</b>
<b>Introduction .....</b>	<b>61</b>
<b>Procurement, Tenders and Contracts .....</b>	<b>61</b>

Procurement Policies .....	61
Tender Processes .....	63
Contracts Awarded.....	65
<b>Other Issues .....</b>	<b>70</b>
<b>Network Security.....</b>	<b>74</b>
<b>Concluding Comments.....</b>	<b>76</b>
<b>5 Services in Regional and Remote Australia .....</b>	<b>79</b>
<b>Fibre .....</b>	<b>80</b>
Case Study: Willunga, South Australia.....	80
<b>Fixed Wireless Services .....</b>	<b>85</b>
Background.....	85
Rollout Progress.....	87
<b>Satellite Access Service .....</b>	<b>88</b>
Background.....	88
Infrastructure.....	89
Interim Satellite Service .....	95
<b>Telephony, Broadband and Black Spots.....</b>	<b>96</b>
<b>Maintenance and Upgrades.....</b>	<b>97</b>
<b>Extending the Fibre Footprint.....</b>	<b>99</b>
<b>Concluding Comments.....</b>	<b>100</b>
<b>6 Private Equity Funding and Telstra Workforce Issues.....</b>	<b>105</b>
<b>Introduction .....</b>	<b>105</b>
<b>Private Equity Funding .....</b>	<b>105</b>
Background.....	105
Existing Legislative Framework.....	108
Policy Rationale and Cost/Benefit.....	109
Private Equity Funding Timeframe .....	112
Debt Financing.....	113
Concluding Comments.....	116
<b>Telstra Workforce Issues.....</b>	<b>117</b>
Background.....	117

Telstra Retraining Funding Deed .....	118
Concluding Comments.....	129
<b>Dissenting Report by Coalition Members and Senators .....</b>	<b>133</b>
<b>NBN's Special Access Undertaking and Wholesale Broadband Agreements .....</b>	<b>133</b>
Recommendations .....	134
<b>Migration to the NBN .....</b>	<b>134</b>
Recommendations .....	135
<b>Rollout of the NBN .....</b>	<b>135</b>
Recommendations .....	136
<b>Advertising on the NBN.....</b>	<b>137</b>
Recommendations .....	137

## **APPENDICES**

<b>Appendix A – Submissions and Exhibits.....</b>	<b>139</b>
<b>Appendix B – Hearings and Witnesses.....</b>	<b>141</b>

## **LIST OF TABLES**

Table 2.1	Key Results of the National Broadband Network Rollout for the six month period ended on 31 December 2011 .....	15
Table 2.2	Key Milestones Achieved Supporting the National Broadband Network Rollout for the six month period ended on 31 December 2011 .....	18
Table 2.3	Key Events and Announcements made Supporting the National Broadband Network Rollout for the six month period ended on 31 December 2011 .....	19
Table 4.1	Key Contracts Awarded by the NBN Co as at 22 May 2012.....	67
Table 4.2	Australian Industry Contracts for Provision and Installation of Local Equipment .....	73
Table 6.1	Telstra Workforce Composition (as at 31 December 2012) .....	121
Table 6.2	NBN Co Workforce Composition .....	129



---

**LIST OF FIGURES**

Figure 5.1	Inspection of Willunga, South Australia .....	81
Figure 5.2	Overview of the NBN Co Wireless Product.....	86
Figure 5.3	Space Segment of the NBN Co Satellite Access Service .....	90
Figure 5.4	Roof-mounted National Broadband Network Satellite Receiver .....	95
Figure 6.1	National Broadband Network Long-term Timeline Commencing in June 2010.....	106
Figure 6.2	NBN Co Funding Profile (debt and equity) to FY2028 (\$billion).....	113





## Committee Membership

**Chair** Mr Robert Oakeshott MP

**Deputy Chair** Mr Rob Mitchell MP (from 14.3.2012)  
Mrs Yvette D' Ath MP (until 14.3.2012)

<b>Members</b>	Mr Paul Fletcher MP	Senator Simon Birmingham
	Mr Luke Hartsuyker MP	Senator Carol Brown (until 21.6.2012)
	Mr Ed Husic MP	Senator Doug Cameron
	Hon Sussan Ley MP	Senator Mary Jo Fisher
	Ms Amanda Rishworth MP (from 21.11. 2011)	Senator Alex Gallacher (from 16.3.2012)
	Ms Michelle Rowland MP (until 21.11.2011)	Senator Scott Ludlam
	Mr Mike Symon MP	Senator the Hon Ian Macdonald
	Hon Malcolm Turnbull MP	Senator the Hon Ursula Stephens (until 16.3.2012)
		Senator the Hon Lin Thorp (from 21.6.2012)

### Participating Members

Senator the Hon Eric Abetz	Senator the Hon David Johnston
Senator Judith Adams (until 31.3.2012)	Senator Barnaby Joyce
Senator Chris Back	Senator Helen Kroger
Senator Cory Bernardi	Senator Gavin Marshall (from 24.3.2011)
Senator Catryna Bilyk (from 24.3.2011)	Senator the Hon Brett Mason
Senator Mark Bishop (from 24.3.2011)	Senator Anne McEwan (from 24.3.2011)

Senator the Hon Ronald Boswell	Senator Claire Moore (from 24.3.2011)
Senator Sue Boyce	Senator Fiona Nash
Senator the Hon George Brandis SC	Mr Paul Neville MP (from 10.5.2011)
Senator Carol Brown (from 21.6.2012)	Senator Stephen Parry
Senator David Bushby	Senator Marise Payne
Senator Michaelia Cash	Senator Helen Polley (from 24.3.2011)
Senator the Hon Richard Colbeck	Senator Louise Pratt (from 24.3.2011)
Senator Mathias Cormann	Senator the Hon Michael Ronaldson
Senator Trish Crossin (from 24.3.2011)	Senator Scott Ryan
Mrs Yvette D'Ath MP (from 19.3.2012)	Hon Bruce Scott MP (from 26.5.2011)
Senator Alan Eggleston	Senator John Williams
Senator the Hon John Faulkner (from 24.3.2011)	Senator Nick Xenophon
Senator Concetta Fierravanti-Wells	
Senator Mitch Fifield	
Senator Mark Furner (from 24.3.2011)	
Senator the Hon Bill Heffernan	
Senator Gary Humphries	

## Committee Secretariat

Committee Secretary	Mr Peter Stephens
Inquiry Secretaries	Ms Stephanie Mikac Dr Kate Sullivan
Research Officer	Ms Lauren Wilson
Administrative Assistant	Miss Kane Moir



## Terms of Reference

The resolution of appointment establishing the Joint Committee on the National Broadband Network was passed by the House of Representatives on 1 March 2011 and by the Senate on 3 March 2011 and provides:

- (1) That a Joint Committee on the National Broadband Network be appointed to inquire into and report on the rollout of the National Broadband Network (NBN);
- (2) That every six months, commencing 31 August 2011, until the NBN is complete and operational, the committee provide progress reports to both Houses of Parliament and to shareholder Ministers on:
  - (a) The rollout of the NBN, including in relation to the Government's objective for NBN Co Limited (NBN Co) to:
    - (i) connect 93 per cent of Australian homes, schools and businesses with fibre-to-the premises technology providing broadband speeds of up to 100 megabits per second, with a minimum fibre coverage obligation of 90 per cent of Australian premises; and
    - (ii) service all remaining premises by a combination of next-generation fixed wireless and satellite technologies providing peak speeds of at least 12 megabits per second;
  - (b) The achievement of take-up targets (including premises passed and covered and services activated) as set out in NBN Co's Corporate Plan released on 20 December 2010 as revised from time to time;
  - (c) Network rollout performance including service levels and faults;
  - (d) The effectiveness of NBN Co in meeting its obligations as set out in its Stakeholder Charter;
  - (e) NBN Co's strategy for engaging with consumers and handling complaints;
  - (f) NBN Co's risk management processes; and
  - (g) Any other matter pertaining to the NBN rollout that the committee considers relevant.





## List of Abbreviations

ACCAN	Australian Communications Consumer Action Network
ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric Digital Subscriber Line
AEW	Automatically Eligible Workgroup
AIG	Australian Industry Group
AIP	Australian Industry Participation Plan
ARA	Australian Retailers Association
BOT	Build-Operate-Transfer
CEO	Chief Executive Officer
CP	Conditions Precedent
CSG	Customer Service Guarantee
Cth	Commonwealth
DBCDE	Department of Broadband, Communications and the Digital Economy
DEP	Digital Enterprise Program
DLG	Digital Local Government
DSL	Digital Subscriber Line
FAN	Fibre Access Node
FY	Financial Year

GB	Gigabyte
GBE	Government Business Enterprise
GHz	Gigahertz
GPON	Gigabit capable Passive Optical Network
HFC	Hybrid Fibre Coaxial
IID	Implementation and Interpretation Deed
ISS	Interim Satellite Service
IT	Information Technology
ITU	International Telecommunications Union
JCNBN	Joint Committee on the National Broadband Network
KPI	Key Performance Indicator
LTSS	Long Term Satellite Service
Mbps	Megabits per second
NBN	National Broadband Network
NBN Co	NBN Co Limited
NSW	New South Wales
NT	Northern Territory
PEA	Public Education Activity
PoI	Point of Interconnect
PON	Passive Optical Network
RDANI	Regional Development Australia Northern Inland
RF	Radio Frequency
RFD	Retraining Funding Deed
RFT	Request for Tender



RoA	Resolution of Appointment
RTO	Registered Training Organisation
RSP	Retail Service Provider
SAS	Satellite Access Service
SA	South Australia
SAU	Special Access Undertaking
SME	Small and Medium-sized Enterprise
SSU	Structural Separation Undertaking
VoIP	Voice over Internet Protocol
VSAT	Very Small Aperture Terminal
WA	Western Australia
WAS	Wireless Access Service
WBA	Wholesale Broadband Agreement
WuW	Work Under Way





# Recommendations

## 2 Performance Reporting

### Recommendation 1

The committee recommends that the NBN Co and the Department of Broadband, Communications and the Digital Economy review the *efficiency* of their current clearance processes for providing answers to questions on notice so that:

- Responses to the majority of questions placed on notice by the Joint Committee on the National Broadband Network can be received by the due date;
- Its answers to parliamentary committees are consistent, thorough and complete, so that ambiguities are minimised in public debate.

### Recommendation 2

The committee recommends the Government include key performance information in its six-monthly National Broadband Network performance report, listing and detailing: (1) established Business Plan targets and (2) actual results for:

- Homes passed;
- Homes connected; and
- Services in operation.

### Recommendation 3

The committee recommends that the NBN Co as soon as possible, provide further key information on its website in a user-friendly format, and also include this information in the six monthly Shareholder Ministers' Performance Report. This information should include:

- The date of the commencement of work in individual service areas;
- The progress of the rollout in each service area (expressed as a percentage);
- The exact date of completion of the National Broadband Network rollout in each service area;
- Information about how to connect to the network; and
- A list of retail service providers active in each service area.

### Recommendation 4

The committee recommends that the Department of Broadband, Communications and the Digital Economy, in the development of future public education activities, undertake a study of similar international networks, with a view to adoption of:

- International best practice;
- Strategies employed by governments and companies building these networks; and
- Concrete examples of how this technology is being used and maximised by individuals, business and governments.

## 3 Regulatory and Pricing Issues

### Recommendation 5

The committee recommends that NBN Co include the consumer protection components of the Customer Service Guarantee in its Wholesale Broadband Agreement.

### Recommendation 6

The committee recommends the Government more effectively deliver its Digital Enterprise Program to small and medium sized enterprises (SMEs) with the aim of improving SME access to online resources and enabling interested SMEs to achieve an online presence.

---

## 4 Contracting

### Recommendation 7

The committee recommends the Department of Broadband, Communications and the Digital Economy review its internal processes where the public interest test is used to assess whether material is commercial-in-confidence, and provide details of this review to the committee.

### Recommendation 8

The committee recommends that, as a matter of urgency, for all future contracts the NBN Co update, and regularly maintain, its tender registry to include the following basic information:

- A list of works included in the original request for tenders;
- The dates at which the tender opened, closed and was awarded;
- The name of the awarded company or companies;
- The length of time the services or goods are expected to be completed;
- The value of the contract, or where commercial sensitivities prohibit disclosure, the aggregate value of the contracts;
- The details of any extensions and variations to contracts as well as the value of an extended contract;
- The value and percentage of local content in the awarded contract; and
- Any other relevant accompanying information.

## 5 Services in Regional and Remote Australia

### Recommendation 9

The committee recommends that the NBN Co revise its terminology and language to clarify community understanding of what the three National Broadband Network services can and cannot support, to enable the community to prepare for the network's services appropriately and become fully informed.

**Recommendation 10**

The committee recommends that the NBN Co include in its web-based interactive rollout map specific information on the provision of voice services for communities in fixed wireless and satellite access areas.

**Recommendation 11**

The committee recommends that the NBN Co finalise its policy for the provision of costing extensions to its planned National Broadband Network fibre footprint:

- And publicise the policy and its process for communities in the fixed wireless and satellite service areas; and
- At the point of announcing new areas within these footprints, ensure that the policy is attached to media releases and known to the relevant local government associations.

**6 Private Equity Funding and Telstra Workforce Issues****Recommendation 12**

While noting possible revisions in this area in NBN Co's next corporate plan, the committee recommends that NBN Co progress its consideration of debt financing arrangements as a priority.

**Recommendation 13**

The committee recommends that the Department of Broadband, Communications and the Digital Economy publicly disseminate a reporting document on annual progress under the Telstra Retraining Funding Deed.

**Recommendation 14**

The committee recommends that NBN Co publicly communicate major areas of emerging training need and workforce demand with regard to the rollout of the National Broadband Network, to assist with future Australian workforce planning in this sector.

**Recommendation 15**

The committee recommends that the Minister for Broadband, Communications and the Digital Economy publish, on an annual basis, a detailed statement outlining the direct and indirect employment benefits of the National Broadband Network (NBN) rollout, including in terms of local/regional employment and major areas of emerging NBN workforce demand.

## Introduction

### Background

- 1.1 The Shareholder Minister's Second Report on the rollout of the National Broadband Network (NBN) details performance information relating to progress of the NBN rollout for the period ended on 31 December 2011.
- 1.2 Since receiving the previous performance report, construction of the NBN is entering into its next phase and progressing to rollout in second release sites across Australia.
- 1.3 In addition, the Regional Backbone Blackspots Program which has established new transmission links to regional centres was completed in December 2011.
- 1.4 Regulatory matters have progressed, with the Australian Competition and Consumer Commission (ACCC) approval of Telstra's<sup>1</sup> Structural Separation Undertaking (SSU) and draft (customer) migration plan. This process has enabled the Binding Definitive Agreement between the NBN Co and Telstra (the Telstra Agreement) to come into force. In turn, the Telstra Agreement will allow for existing Telstra telecommunications infrastructure to be used for the NBN rollout and Telstra customers to be migrated to the NBN.
- 1.5 The Binding Definitive Agreement between the NBN Co and Singtel Optus (the Optus Agreement), has also received ACCC approval. The Optus Agreement, similarly to the Telstra Agreement will enable

---

1 Telstra Corporation

decommissioning of the Optus Hybrid Fibre Coaxial (HFC) network and migration of its customers to the NBN.

- 1.6 While the ACCC's consideration of the NBN Co's Special Access Undertaking (SAU) is yet to be completed, 40 Retail Service Providers (RSPs) have signed a 12-month Wholesale Broadband Agreement (WBA) with the NBN Co and around 26 of these RSPs are offering internet services through the NBN.<sup>2</sup>
- 1.7 Matters such as the timeframe for receiving the NBN, and requests for the extension of the fibre footprint were raised during the previous review period. These issues and associated community consultation, as well as the adequacy of NBN rollout reporting remain topical for the Third Review.

## Committee's Role

- 1.8 Pursuant to its Resolution of Appointment (RoA) and in accordance with its terms of reference, the committee is required to report to the Parliament and the NBN Shareholder Ministers<sup>3</sup> every six months 'until the NBN is complete and operational'.
- 1.9 The committee is primarily enabled to examine and report on matters relating to the NBN Co's objective to connect Australian premises to the NBN which includes:
- The achievement of take-up targets as outlined in the NBN Co Corporate Plan.
  - NBN Rollout performance and matters relating to the NBN Co such as consumer engagement, complaint handling, risk management.
  - 'Any other matter pertaining to the NBN rollout that the committee considers relevant.'
- 1.10 As part of the review process, the committee has previously commented on the type of performance information it would like to receive NBN rollout data on. This includes key performance indicators that it considers would provide an accurate 'snap shot' of NBN rollout progress.
- 

2 This figure is correct as of 16 April 2012. Mr Mike Quigley, Chief Executive Officer, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 45.

3 The Shareholder Ministers are Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy and Senator the Hon Penny Wong, Minister for Finance and Deregulation.



- 1.11 The performance information provided in the Shareholder Ministers' report forms the basis for the committee's six-monthly review of the NBN rollout. This information is further examined and supplemented by submissions, published reports, hearings and questions placed on notice which are part of the usual parliamentary committee inquiry process.
- 1.12 The Shareholder Ministers' performance report provides an overview of the NBN Co's progress in managing the NBN rollout and covers the six month period from 1 July to 31 December 2011, as well as an update on matters progressed until 31 March 2012. As a result, the committee is able to follow and report on matters that have been progressed and also on issues that are current and may be deemed to require future action.
- 1.13 To date, the committee has reviewed and reported on a number of significant and ongoing issues associated with the rollout of the NBN. These issues include:
- NBN rollout across the three technologies of fibre, wireless and satellite
  - issues raised and faced by regional and remote areas
  - regulatory issues associated with establishment of the NBN
  - e-readiness of communities, governments and individuals and associated consultation by the NBN Co.

## Reporting Timetable

- 1.14 The committee's First Report<sup>4</sup> was presented to the Parliament to meet its 31 August 2011 reporting date and included discussion about the role of the committee, the conduct of future reviews and an overview of the NBN rollout program. The committee again reported to the Parliament on 24 November 2011 through its Second Report. The Second Report included additional comment on issues raised in the First Report as well as introducing a number of new areas of review.
- 1.15 By presenting its Second Report before the end of the first reporting period, the committee adjusted its reporting timetable from the six month period starting in August and ending in February (as provided for in its RoA) to the period which commences in June and ends in December.

---

4 The committee's first reporting period included the six months from its establishment in early March 2011 to its reporting date of 31 August 2011.

- 1.16 The change in reporting timetable was supported by the Shareholder Ministers who agreed to provide a six-monthly report to the NBN rollout review process no later than three months before the expected reporting date.
- 1.17 After initial delay, the committee received the Shareholder Minister's first six-monthly performance report on 23 September 2011. The performance report included information relevant to the progress of the NBN rollout for the six-month period ended on 30 June 2011. The Shareholder Minister's second report, received on 9 April 2012 provides similar information on the progress of the NBN rollout and covers the six-month period ended on 31 December 2011.
- 1.18 During the Third Review period, the Government also formally responded to the committee's First and Second Reports.

## About the Review

### Objectives and Scope

- 1.19 As part of its Third Review of the six-monthly rollout of the NBN, the committee examined and provided comment on the:
- NBN rollout, through the fibre, wireless and satellite networks
  - Shareholder Ministers' six monthly performance report
  - ongoing regulatory and pricing matters
  - e-readiness of small and medium-sized enterprises (SMEs).
- 1.20 Through a working-group approach, the committee has also continued its examination of the following:
- The potential of private equity to fund the NBN; and
  - Telstra workforce issues associated with the Retraining Funding Deed under the Telstra Agreement.
- 1.21 In addition to these matters, the committee has continued to examine issues raised during the First and Second Reviews and broader issues arising from the NBN rollout. These issues include the regulatory framework underpinning the NBN rollout, and the NBN rollout schedule in regard to community expectations and consultation.

## Conduct

- 1.22 The review was announced and submissions called for through the issue of media releases on 29 February and 5 March 2012 and an advertisement in *The Australian* on 7 March 2012. Submissions were requested to be received by 5 April 2012.
- 1.23 Appendix A lists the 22 submissions and two exhibits received as part of the committee's Third Review.
- 1.24 The committee subsequently held two public hearings on 16 and 30 April 2012 in Sydney and Willunga<sup>5</sup>, respectively. The committee also conducted an inspection in Willunga on 30 April 2012.
- 1.25 Witnesses who gave evidence at public hearings are listed at Appendix B. Transcripts of the public hearings are available at [www.aph.gov.au/jcnbn](http://www.aph.gov.au/jcnbn).

## Inspection

- 1.26 On 30 April 2012, as part of its Third Review the committee conducted an inspection of various NBN rollout sites in the first release location of Willunga. The NBN infrastructure seen at the Willunga inspection expanded on similar information received and infrastructure visited at the Broken Hill and Melbourne inspections in relation to the committee's Second Review.
- 1.27 As part of the inspection, the committee: viewed NBN street infrastructure which forms part of the NBN fibre network. In addition, the committee inspected the types of products and applications an NBN connection can provide for research and learning by visiting the Community Library and Willunga High School. The committee also visited a local business which is connected to the NBN, viewed the premise connecting devices and discussed the business' experience of the NBN.
- 1.28 The inspection is discussed in more detail in Chapter 5.

## Report Outline

- 1.29 Chapter 2 examines the NBN rollout performance information and associated issues. This includes discussion about the revision of targets and key performance indicators contained in the NBN Co Corporate Plan,
- 

5 Willunga is located 46 kilometres south of Adelaide (South Australia) with a population of approximately 2300.

in the context of the changed regulatory environment and the release of the 3-year NBN rollout schedule.

- 1.30 Chapter 3 contains an overview of the regulatory and pricing issues associated with the rollout of the NBN. Matters discussed include: the coming into force of the Telstra and Optus Agreements, the ACCC review of the NBN Co SAU and developments relating to the WBA. This chapter also includes discussion about improving the e-readiness of SMEs.
- 1.31 Chapter 4 outlines the issues associated with the construction contracts awarded by the NBN Co for First Release sites. More broadly, network security considerations in awarding contracts and the possible impact on the NBN rollout is also discussed.
- 1.32 Chapter 5 builds on the findings from the First and Second Reports in regard to the advantages and challenges presented by the NBN rollout in regional and remote areas of Australia.
- 1.33 Chapter 6 examines issues associated with private equity engagement in funding the NBN. It also considers Telstra workforce issues associated with the Retraining Funding Deed under the Telstra Agreement.

## Performance Reporting

### Background

- 2.1 The Shareholder Ministers' second National Broadband Network (NBN) rollout Performance Report (the Performance Report) was provided to the committee on 10 April 2012. The Performance Report covers the six month period ended on 31 December 2011 and is based on information provided by the NBN Co to the Government as part of its regular obligatory reporting arrangements.
- 2.2 The Performance Report, similarly to the previous Performance Report includes:
- A summary of the key milestones achieved by the NBN Co.
  - Year to date financial reports for the period ended 31 December 2011.
  - 'Measurement against' NBN Co's Key Performance Indicators (KPIs).<sup>1</sup>
- 2.3 This chapter outlines the performance related information associated with the physical NBN rollout and NBN Co's public engagement on the NBN rollout. An update on regulatory and pricing matters associated with the NBN rollout including the e-readiness of small business is discussed in Chapter 3 of this report. Remaining issues raised in the Government's Performance Report such as the NBN rollout in regional and remote areas and contracting are discussed further in the remaining chapters of this report.

---

1 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 3.

## Key Features of the Performance Report

### Format and Content

2.4 The Government's Second NBN rollout Performance Report contains similar information to the Government's First performance report with the exclusion of the half yearly corporate plan target.

2.5 Unaudited financial statements have again been included in the Performance Report. No explanation as to the unaudited status of the financial reporting has been provided.

2.6 In the cover letter to the Performance Report the Shareholder Ministers have stated that 'some information' on the NBN rollout performance has not been included in the second performance report as the rollout is in its early stages. The Shareholder Ministers advised that the information contained in the performance report:

... will become more detailed as the rollout progresses, as more premises are connected and as NBN Co's operating and business systems come online during this year.<sup>2</sup>

2.7 The Performance Report reiterates this point with the Shareholder Ministers' statement:

This is the second government report to the Joint Committee on the National Broadband Network and as such reflects initial early reporting while systems and reporting processes are still under development. The data will become more meaningful against actual and forecast measures as the reporting series builds up over time. This report is consistent with a start up company in the early years of a network rollout.<sup>3</sup>

2.8 Following a previous request to receive statistical NBN rollout information in tabular form with reporting against specific KPIs,<sup>4</sup> the shareholder Ministers responded in the Performance Report with:

..the Government is supportive of providing the joint committee with quality information to inform its review of the NBN rollout...

---

2 Shareholder Ministers, 'Cover Letter to Performance Report to 31 December 2011, dated 9 April 2012', *Submission 12*, p. 3.

3 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 3.

4 The KPIs were: 1) number of homes passed by the network, 2) homes connected to the network, and 3) services connected to the network in operation, for reference a) the projections in the business plan and b) actual results.

however, information on the cost per premises passed or activated and take up rates broken down into levels of service is not meaningful at this point in time based on NBN Co's business and operating systems still being developed, the delays arising from completion of the Definitive Agreements and the finalisation of the fibre contracts.<sup>5</sup>

2.9 Later in regard to the same request, the Department of Broadband, Communications and the Digital Economy (DBCDE) responded by stating:

Once NBN Co's 2012-2015 Corporate Plan is finalised, the Government will consult NBN Co in regard to this request and follow up with the Joint Committee in the context of future Shareholder Ministers' reports.<sup>6</sup>

## Key Performance Indicators

### National Broadband Network Rollout Targets

2.10 On 16 April 2012, the NBN Co informed the committee that it would be revising the NBN rollout targets contained in the NBN Co 2011-2013 Corporate Plan. Targets would be revised and published through the release of a new corporate plan to the Government by the end of May 2012.<sup>7</sup>

2.11 The assumptions on which the NBN rollout targets (as contained in the NBN Co 2011-2013 Corporate Plan) were dependent are:

- 'The availability of exchange facilities for the location of the semi-distributed [points of interconnect] (PoI);
- Negotiations yet to finalise on commercially attractive terms the procurement of Greenfields Build-Operate-Transfer (BOT); and
- Securing contracts with suppliers and construction contractors on competitive terms and conditions.'<sup>8</sup>

---

5 Shareholder Ministers, 'Cover Letter to Performance Report to 31 December 2011, dated 9 April 2012', *Submission 12*, p. 3.

6 Department of Broadband Communications and the Digital Economy (DBCDE), *Submission 3.1*, Answer to Question on Notice no. 16.

7 Mr Mike Quigley, Chief Executive Officer, NBN Co Limited (NBN Co), Transcript of Evidence, Sydney, 16 April 2012; DBCDE, *Submission 3.1*, Answer to Question on Notice No.16.

8 NBN Co, *Corporate Plan 2011-2013*, December 2010, p. 16.

- 2.12 The NBN Co explained that ‘a number of assumptions... made’ in the NBN Co 2011-2013 Corporate Plan had ‘changed for reasons which... [it] simply could not control.’<sup>9</sup>
- 2.13 The NBN Co further stated that the new corporate plan would incorporate the recent changes to the NBN rollout policy and regulatory environment. These changes included factoring into the revised NBN rollout targets: the time taken to complete the Telstra Agreement, the Australian Competition and Consumer Commission (ACCC) advice to change the number of POIs from 14 to 121, and the Government’s change in Greenfields policy.<sup>10</sup>
- 2.14 More importantly, the NBN Co commented that as a result of the change in assumptions underpinning the current corporate plan, that current NBN rollout targets were no longer relevant in measuring either the progress of the NBN rollout or the performance of the NBN Co. Further, the NBN Co stated that if the assumptions underpinning the revised NBN rollout targets were to change again, that the corporate plan would have to again be revised. The NBN Co explained:
- We are now in the process of developing a new corporate plan based on current assumptions and we will provide this to government at the end of May. So it is neither reasonable nor valid to compare NBN Co's performance with the deployment forecasts that were included in the December 2010 corporate plan. However, it is perfectly legitimate to measure NBN Co's performance against the announcements we have made in our 12-month and three-year rollout schedules. We are ready to be measured and held accountable for our performance versus what we have committed to in those rollout schedules, but I would also like to be clear that, if there are any future policy changes, the assumptions in the corporate plan we are about to submit may have to change.<sup>11</sup>
- 2.15 In the context of the unpredictable impact of the change to the Greenfields policy, the DBCDE stated there are no future plans to significantly alter the Government’s Statement of Expectations. Mr Peter Harris, Secretary to the DBCDE stated:
- 

9 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 47.

10 The remaining assumption made in the NBN Co 2011-2013 Corporate Plan is ‘securing contracts with suppliers and construction contractors on competitive terms and conditions.’ Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 47 and NBN Co, *Corporate Plan 2011-2013*, p. 16.

11 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, pp 47-48.



I am not aware of any significant changes planned for the statement of expectations. As Mr Quigley said when he was referring particularly to greenfields, the financial heads of agreement and the greenfields arrangements with Telstra, in the middle of 2010 through to the middle of 2011, varied a number of times. That made it quite difficult for any of the parties including Telstra as much as NBN Co to forecast what the impact on themselves would be. That was driven substantially by the fact that none of the parties had a very good handle on this. There was a lot of claim being made about a residual bow wave – or how many applications had already been lodged over many years prior to this for greenfields. Those numbers varied significantly. Then there were signals from developers that they also had a huge number of applications ready to go and subsequently lodge. As Mr Quigley said, it did not quite pan out in the way we had expected.<sup>12</sup>

- 2.16 The DBCDE also stated it is unlikely that there will be further change to the Greenfields policy, nor any significant change to current policy. This is with the exception of addressing ‘operational issues’ affecting the NBN rollout. The DBCDE cited the example of the battery back-up issue as posing a possible change in existing policy. The DBCDE stated:

I am not aware therefore the greenfields policy is going to change any further. Any of us who have been involved in that would chuck ourselves off the top of a tall building rather than change greenfields policy again. I therefore do not anticipate any changes of that magnitude nor any other significant changes to what is in place. That said, there will potentially be, in the course of the rollout, things which you might call 'operational issues' still to be addressed. I guess the committee is aware of battery backup as an example. Those are the sorts of things that could change but I would not call that – I am trying to answer your question here in a holistic way – quite a statement of expectations type shift, even though if potentially something does shift in battery backup it may well have a significant financial saving option available to it.<sup>13</sup>

- 2.17 In contrast Telstra Corporation (Telstra) did not ‘believe that any impact on NBN rollout had much to do with the regulatory process’ and stated:

---

12 Mr Peter Harris, Secretary, Department of Broadband, Communications and the Digital Economy (DBCDE), Transcript of Evidence, Sydney, 16 April 2012, p. 49.

13 Mr Harris, DBCDE, Transcript of Evidence, Sydney, 16 April 2012, p. 49.

The explanatory memorandum [to the Binding Definitive Agreement between Telstra and the NBN Co] makes clear that there were interim arrangements in place with the NBN. We believe that any impact on NBN rollout did not have much to do with this regulatory process. ...the regulatory process was very long and very complex – harder work than all of us anticipated. The ACCC did a very thorough job...double checking and triple checking the undertaking. They talked to a lot of people around our structural separation undertaking in particular the interim equivalence in transparency arrangements. That did take a very long time but we got there in the end. We have an outcome that, I believe, will hopefully start to reduce a lot of the concern and angst in the industry in the interim period around the equivalence to copper. And we got the undertaking which will allow the definitive agreements to become unconditional. We are now spending a lot of time making sure we get the contract going, deliver on the contract and comply with our commitments under the structural separation undertaking.<sup>14</sup>

- 2.18 Further, Telstra stated that it is not made aware of the status of the progress of the NBN rollout ahead of public information being made available by the NBN Co. Telstra stated:

One of the critical things we had to build into the agreements between Telstra and the NBN – and you could understand why – was we have no privileged information on where NBN is at in the rollout. So any information that comes from NBN as to where it is in its roll-out schedule and what [it] is going to do comes to us at exactly the same time that it comes to everyone. Our knowledge of the NBN rollout is very much the same as and predicated on general public information. We do not have a huge amount to add to – I am sure NBN will explain this afternoon – where they are at in their rollout schedule.<sup>15</sup>

## **Benchmarking National Broadband Network Rollout Progress**

- 2.19 On 18 October 2011, the NBN Co made available on its website, a 12-month NBN ‘construction schedule’ which included area rollout maps. The schedule identified where construction work was already underway (on 63 500 premises) and where work would begin from the date of
- 

14 Dr Tony Warren, Telstra Corporation (Telstra), Transcript of Evidence, Sydney, 16 April 2012, p. 34.

15 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 34.

schedule issue to September 2012 (across 28 new locations passing 485 000 premises to be connected to the fibre network).<sup>16</sup>

- 2.20 As part of the rollout schedule announcement the NBN Co stated that 'on average it is expected to take 12 months from the start of the fibre network rollout in a given area until individuals are able to receive high-speed broadband over the NBN.' The rollout schedule would be updated quarterly to 'include additional locations.'<sup>17</sup>
- 2.21 Complementary to and building on the information contained in the 12 month NBN rollout schedule, on 29 March 2012, the NBN Co released a three-year NBN rollout plan. The three-year NBN rollout plan included 'three quarters of a million premises where construction work is underway or set to begin' in 2012, 'including the eight early [release] locations where the fibre network is already in service.'<sup>18</sup>
- 2.22 As part of the three year rollout schedule, the NBN Co created a new KPI of 'Work Under Way' (WuW) to indicate the status of construction projects that had commenced. The KPI of WuW 'represents premises currently undergoing site design and/or existing construction activity.'<sup>19</sup>
- 2.23 Regardless of the addition of the new KPI -WuW, the NBN Co assured the committee that there would be no change to, or revision of, the NBN rollout targets on the two main KPIs used in measuring NBN rollout performance- those of 'premises passed' and 'premises activated'. The NBN Co explained:

I now turn to the recent announcement we made on the three-year rollout schedule. By mid-2015, the fibre rollout will be underway or completed in one-third of the country; that is, in over 3.5 million homes and businesses in more than 1500 communities, in every state and territory. There has been some commentary that by referring to 'work under way' NBN Co has changed the definitions used. I want to assure you that we have not done that. We have not changed our definitions. The terms 'premises passed' and 'premises activated' are what we used in our last corporate plan and we will be putting them in the next corporate plan.<sup>20</sup>

- 2.24 Further, the NBN Co stated that it would factor into its new corporate plan the policy changes pertaining to the NBN rollout in addition to the
- 

16 NBN Co, 2011, *NBN Co Releases 12-month National Rollout plan*, media release, 18 October.

17 NBN Co, 2011, *NBN Co Releases 12-month National Rollout plan*, media release, 18 October.

18 NBN Co, 2012, *Three year rollout plan announced*, media release, 29 March.

19 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 4.

20 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

12-month and 3-year rollout announcement for the purpose of benchmarking future NBN rollout progress. The NBN Co stated:

...we are working on that timetable now to take on board all the things – at least three of the things I just mentioned there; there are some others, of course. All of those will be incorporated into the next version of the corporate plan, which we will be submitting to the government in the second quarter. That, I think, will then form quite clearly the benchmark against which we will be measured, including, of course, the 12-month and the three-year announcement we have just gone out with.<sup>21</sup>

## National Broadband Network Rollout Progress

### Progress over the Reporting Period

- 2.25 The Performance Report included information about the progress of the NBN rollout over the period from 1 July to 31 December 2011, in addition to developments associated with the NBN rollout from the period covering 1 January 2012 until 31 March 2012.
- 2.26 The key results for the NBN rollout for the specified period are shown in *Table 2.1 – Key Results of the National Broadband Network Rollout for the six month period ended on 31 December 2011*.
- 2.27 On 18 October 2011, the NBN Co released a twelve-month NBN rollout schedule identifying 28 new locations covering 485 000 premises where construction of the NBN would begin over the period. The 12-month schedule also listed sites where the rollout is already underway for 63 500 premises ‘including second release sites, such as Geraldton in Western Australia, and extensions to First Release Sites such as Townsville in Queensland.’<sup>22</sup>
- 2.28 There are no half yearly targets contained in the NBN Co 2011-2013 Corporate Plan, instead targets are provided for the financial year periods ended on 30 June for 2011, 2012 and 2013.<sup>23</sup>

---

21 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 49.

22 Shareholder Ministers, ‘Performance Report to 31 December 2011’, *Submission 12*, p. 9.

23 NBN Co, *Corporate Plan 2011-2013*, December 2010, p. 15.

Table 2.1 Key Results of the National Broadband Network Rollout for the six month period ended on 31 December 2011

Metrics	Cumulative as at 31 December 2011	Cumulative as at 30 June 2011
<b>Work under way (WuW)</b>		
Brownfields	77 357	11 187
New Developments	12 723	-
First Release Interim Satellite	-	-
Fixed Wireless	1952	-
<b>Premises passed/covered</b>		
Brownfields	18 243	18 243
New Developments	951	-
First Release Interim Satellite	165 000	165 000
Fixed Wireless	-	-
<b>Premises activated</b>		
Brownfields	2095	622
New Developments	110	-
First Release Interim Satellite	2197	-
Fixed Wireless	-	-

Source Shareholder Ministers' Performance Report, Submission 12, p. 4.

## Fibre Network

2.29 By the end of the period, 14 256 premises were passed and 1438 premises were receiving active service.<sup>24</sup>

2.30 Progress on the Tasmania Stage One NBN rollout was:

- 'A total of 3987 premises have been passed by the fibre network;
- 657 premises are receiving active services;

24 Shareholder Ministers, 'Performance Report to 31 December 2011', Submission 12, p. 9.

- of the premises passed, there are a further 1397 premises...connected' [to the NBN] but are 'not yet receiving active services.'<sup>25</sup>
- 2.31 There were 11 187 premises under construction in the Tasmania Stage Two NBN rollout. In particular:
- civil construction continued in Sorell, Deloraine, Kingston and George Town
  - the passive network was completed in Triabunna
  - 'planning and design of the South Hobart network progressed.'<sup>26</sup>
- 2.32 For Greenfields or 'new developments', by the end of the period 110 premises were receiving active services. Over the period NBN Co 'received 2956 applications from developers, with 1988 active applications covering 109 988 lots.'<sup>27</sup>

### Fixed Wireless Network

- 2.33 In relation to the Fixed Wireless Network, the following progress was made:
- Fixed Wireless trial sites came into service in Armidale, with 'fixed wireless data connections ... established from Armidale to the National Test Facility.'<sup>28</sup>
  - Construction commenced in the Armidale, Tamworth and Toowoomba wireless service areas.<sup>29</sup>
  - Testing of [Long Term Evolution]<sup>30</sup> technology for fixed wireless application was completed. The equipment was further 'integrated into the National Operations Centre in readiness for managed operations.'<sup>31</sup>

### Satellite Network

- 2.34 In relation to the Satellite Network, the following progress was made:
- The Interim Satellite Service (ISS) was launched.

---

25 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 9.

26 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 10.

27 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 11.

28 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

29 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

30 'Commonly referred to as 4G technology.' NBN Co, *Corporate Plan 2011-2013*, Glossary of Terms, p. 156.

31 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

- ISS trials were completed and service availability 'was ramped up' in November.
- There were seven retail service providers (RSPs) offering NBN services over the satellite network to 2197 active premises. 'Additional satellite capacity was commissioned by using the IPStar satellite.'
- Development and release of the 'final spacecraft requirements specification for the Long Term Satellite [Service] (LTSS) project.'
- Responses to request for tenders for the LTSS and the ground systems and customer equipment were received and were 'being evaluated.'
- 'Feasibility, quantity surveying and preliminary town planning work commenced on a list of potential radio frequency (RF) gateway sites across the country.'
- 'Frequency coordination associated with the International Telecommunications Union orbital slot confirmation process commenced and continued with both domestic and international operators.'
- Spectrum was obtained for use in the provision of the LTSS.
- Announcement of build on two next generation Ka Band Satellites to be completed by 2015.<sup>32</sup>

## Key Milestones Achieved

2.35 Over the period, the Shareholder Ministers identified a number of key milestones achieved in facilitating progress of the NBN rollout. Table 2.2 summarises these milestones.

---

32 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, pp 12-13.

**Table 2.2 Key Milestones Achieved Supporting the National Broadband Network Rollout for the six month period ended on 31 December 2011**

<b>Date (2011)</b>	<b>Event/Announcement</b>
6 September	NBN Co signed two separate agreements enabling NBN rollout in Western Australia (Syntheo) and Victoria (Transfield)
7 September	The first new housing development was switched on in Western Sydney
30 September	Met the 'ready for commercial service' milestone for the first release sites on 30 September 2011
1 July	NBN Co launched its Interim Satellite Service
22 September	Initial NBN rollout plan agreed with Telstra
18 October	NBN Co released a twelve month NBN rollout schedule
14 November	Contract to build the first stage of the NBN in South Australia and the Northern Territory awarded to Syntheo
15 November	'Contracts to provide an array of equipment for installation in homes and businesses, worth up to \$635 million over the next five years, were executed'
25 November	NBN Co launched: two demonstration facilities, the Discovery Centre in Docklands, Melbourne and the NBN Co Demonstration Truck to travel across Australia
30 November	'The final executable version of the Wholesale Broadband Agreement (WBA) was published. As at 31 December 2011, eleven' RSPs 'had signed the WBA'
5 December	NBN Co lodged its revised Special Access Undertaking (SAU) with the ACCC
5 December	Telstra and NBN Co extended the end date of the Implementation and Interpretation Deed (IID) to 30 March 2012
31 December	Delivery of the transit schedule in line with the initial rollout plan with 26 Fibre Access Nodes (FAN) and aggregation node sites handed over from Telstra
31 December	NBN Co had WuW across all delivery platforms covering 92 032 premises

Source Shareholder Ministers' Performance Report, Submission 12, p. 3.

## Current NBN Rollout Progress

2.36 In addition to containing information on the progress of the NBN rollout for the requested six month period, the performance report includes an overview of the 'post-closing events' since finalisation of the report. Post



closing events include the key announcements made and events which took place until 31 March 2012.

- 2.37 The shareholder Ministers identified the items in Table 2.3 as key announcements and events contributing to the progress of the NBN rollout. These developments cover the period from 1 January to 31 March 2012.

**Table 2.3 Key Events and Announcements made Supporting the National Broadband Network Rollout for the six month period ended on 31 December 2011**

<b>Date (2012)</b>	<b>Event/Announcement</b>
8 February	NBN Co announced that Space Systems/Loral will build two next generation Ka-band satellites
15 February	NBN Co released a quarterly update to its 12-month rollout schedule
28 February	ACCC accepted Telstra's Structural Separation Undertaking (SSU) and draft Migration Plan
7 March	The Definitive Agreements between NBN Co and Telstra Corporation Limited (Telstra) became unconditional
16 March	A total of 7282 customers are connected to broadband services over the NBN
26 March	NBN Co announced that Visionstream Australia Pty Ltd will undertake construction of the remainder of the fibre network in Tasmania
29 March	NBN Co released its indicative three year rollout plan which will see NBN construction either begin or be completed by mid 2015 for more than 3.5 million homes, businesses, schools and hospitals across Australia
31 March	39 RSPs have signed the WBA

*Source* Shareholder Ministers' Performance Report, Submission 12, p. 4.

## **NBN Co Limited Financial Result**

- 2.38 The financial result and associated financial performance information presented in the Government's performance report covers the six month period from 1 July to 31 December 2011. The accompanying income and

cash flow statements, balance sheet and schedule of commitments are presented as unaudited.<sup>33</sup>

- 2.39 For the first time since its establishment, on 4 October 2011, the NBN Co commenced 'billing for commercial services'.<sup>34</sup> As a result the NBN Co received a 'telecommunications revenue' of \$356 000 and with an interest income gave the NBN Co a total half yearly revenue of approximately \$30 million.<sup>35</sup>
- 2.40 With total expenses exceeding total revenue over the six month period ended 31 December 2011<sup>36</sup> the NBN Co experienced a consolidated operating loss of approximately \$221 million.<sup>37</sup>
- 2.41 Due to the financial loss experienced over the period, the NBN Co has recorded a 'nil tax expense' for the period with 'no deferred tax asset... recognised for these tax losses at this stage.'<sup>38</sup> In addition, the Performance Report states that the NBN Co 'expects to be in a tax loss situation for the current and next several financial years.'<sup>39</sup>
- 2.42 The consolidated half yearly financial loss is 'mainly' attributed to:
- '\$101 million of employee-related expenses'... 'driven by the headcount increase of 822 employees' (\$50 million for the corresponding period).
  - '\$40 million for IT and facilities expenses... (\$12 million for the corresponding period)'.
  - '\$29 million for external services costs... (\$31 million for the corresponding period).'<sup>40</sup>
- 2.43 Capital expenses over the period were \$346 million and included approximately:
- \$98 million for the rollout of the NBN across the three technologies of fibre, wireless and satellite
  - \$124 million on 'systems and processes, including Data centres, National Support and Operations Centre, Business Support Systems and Operational Support Systems
- 

33 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, pp 20-25.

34 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

35 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 22.

36 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 22.

37 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, pp 20 and 22.

38 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

39 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

40 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

- \$41 million on new developments and Customer Connection expenditure.<sup>41</sup>
- 2.44 Operating expenditure over the period was approximately \$222 million. The operating expenditure target stated in the NBN Co 2011-2013 Corporate Plan for the financial year ending on 30 June 2012 is \$528 million. The current operating expenditure result represents approximately 42 per cent of the target total.<sup>42</sup>
- 2.45 An equity injection of \$1 120 000 million assisted to produce a cash flow of \$1 143 643 million at the end of the financial period, a \$605 million increase from that in June 2011.<sup>43</sup>
- 2.46 For the half yearly period, commitments payable have increased by approximately \$434 million.<sup>44</sup>
- 2.47 Estimated financial targets derived from the NBN Co's 2011-2013 Corporate Plan for the half yearly 2011-2012 result have not been included as these were not made available in the current Performance Report.
- 2.48 In its report to the committee, the Shareholder Ministers have again stated its 'report is consistent with a start-up company in the early years of a network rollout.'<sup>45</sup>
- 2.49 Mr Mike Quigley, Chief Executive Officer of NBN Co, similarly stated that the financial results of the NBN Co have met current expectations and reflect that the company is in 'start-up mode'.<sup>46</sup> Mr Quigley also stated:
- Given where we are that is about what we expect it to be. That is what you would expect at this point in time. Clearly, it is a function of the rate at which you get customers passed and customers activated.<sup>47</sup>

---

41 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

42 NBN Co, *Corporate Plan 2011-2013*, December 2010, p. 135.

43 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 20.

44 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, pp 20 and 25.

45 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 3.

46 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 51.

47 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 51.

## Community Consultation

### Background

2.50 The committee's Second Report made a number of findings in relation to engagement and consultation with communities about the NBN rollout. In particular, the committee highlighted a need for effective consultation and engagement with rural and regional areas.

2.51 In this respect, the committee recommended the NBN Co 'finalise and publicise its plans for community consultation with regional remote Australia' and requested the performance report include information on:

- Details of the progress of its consultation plans;
- Issues raised; and
- Numbers of participants.<sup>48</sup>

2.52 The Government broadly supported this recommendation and has included the requested information in both its formal response to the Second Report as well as its second six-monthly NBN rollout performance report.<sup>49</sup>

2.53 In response to the committee's findings and recommendation, the Shareholder Ministers stated:

NBN Co has a dedicated team to engage with communities and stakeholders throughout the rollout process and is building relationships with local authorities and utilities to ensure it takes full account of their requirements and develops community understanding of the company's project plan as the project progresses.<sup>50</sup>

### Addressing the Information Gap

2.54 To assist the community with the 'when', 'what' and 'how' questions related to the rollout, the NBN Co launched two demonstration facilities

---

48 JCNBN, November 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 124.

49 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 7.

50 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 7.

on 25 November 2011: the Discovery Centre in Melbourne and the Demonstration Truck to travel across Australia.<sup>51</sup>

2.55 As at 31 December 2011, the Demonstration Truck visited ten locations in Tasmania.<sup>52</sup> From November 2011 to April 2012, the Truck visited 49 communities across Tasmania and Victoria and hosted more than 5200 visitors.<sup>53</sup>

2.56 The NBN Co has also held town hall sessions with an average of 200 residents attending those forums. A national Customer Contact Centre will be based in Queensland staffed by over 100 employees.<sup>54</sup> The Centre is expected to be operational in 2012.<sup>55</sup>

2.57 The NBN Co will launch three key 'public outreach campaigns' in 2012: These are:

- Public Education Activity (PEA) (which will facilitate continuity of telecommunications services when the copper network is retired).
- A sectoral benefits campaign (starting with the Education sector).
- An NBN interest and understanding generating campaign.<sup>56</sup>

2.58 In regard to the PEA campaign, the Performance Report stated that the NBN Co 'is working with government and industry in an appropriate governance and consultation structure'.<sup>57</sup>

2.59 In regard to its overall public engagement and education activities and campaigns the NBN Co stated:

Over the next three years we are going to be appearing in around one-third of Australia's communities, so is important that we set about informing, and engaging, individuals and communities about what it is we are doing, and explaining what it is the NBN will do for them.

To those ends, all of our efforts in our communications, our community engagement and our stakeholder engagement reach

---

51 Mr Kieren Cooney, Chief Communications Officer, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

52 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 8.

53 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

54 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

55 NBN Co, 2012, *Gold Coast chosen for NBN Co Customer Contact Centre*, media release, 11 April .

56 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 7.

57 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 7.

three objectives: the first one being to inform, the second one being to prepare, and the third one being to assist in migration.

The first objective is to inform. Over the next three years, trucks, workmen and giant rolls of fibre will begin to appear in around one-third of Australia's cities, towns and suburbs. It is important that we ensure that people are aware, as we will be active in their communities and on their premises and on their properties, of what it is we are, what we are doing and what it will mean for them.<sup>58</sup>

2.60 On 29 March 2012, as part of its 'community informing' agenda, the NBN Co released a three year rollout schedule which names those areas where work will commence and has already commenced over a three year period. The NBN Co also commenced its first advertising campaign for the three year rollout schedule. Communities included in the schedule were targeted through television, online, radio and print advertising.<sup>59</sup>

2.61 The NBN Co explained the purpose of the release of its three year NBN rollout schedule and stated:

The information that we provided in the three-year rollout plan serves a different purpose from that in the corporate plan. It provides communities and our retail telco customers with information on where work will be starting. In fact, this committee in its second report urged NBN Co to provide more information to communities and noted that the three-year rollout plan would assist in this. We absolutely agree. We want to give people the information that is most relevant to them. People want to know when they will see NBN workers in their streets, so our rollout schedule tells them when work will start in their area. From that, they will also have a very good idea about when work will finish in their area, which is on average 12 months from when work begins.<sup>60</sup>

2.62 Of the 'customer migration' component of its public engagement and education activities, the NBN Co stated that customer migration from the copper network to the NBN would occur through customers becoming informed about the NBN and then signing up for services provided by RSPs. The NBN Co explained:

---

58 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

59 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, pp 45-46.

60 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

Our business plan stipulates that over the next decade we will migrate every Australian premise from the old copper infrastructure over to the NBN. That is 12 million homes and businesses – the important point being that for every one of those household owners, for every one of those business people, they need to take an action. They need to take a step. They need to call up their local retail service provider and order a service. To do that they need to understand, they need to be motivated and they need to have the information about what the NBN is, when it will be available for them and what the benefits are that they can hope to achieve from it.<sup>61</sup>

## Public Engagement Activities

2.63 A core objective of the NBN Co's communication strategy is to prepare communities for the NBN.<sup>62</sup> The NBN Co's Chief Communications Officer stated:

On the second objective, to prepare: it is essential that we ensure communities and institutions are fully prepared to capitalise on the benefits of the NBN. A great example of this is in the Illawarra, where the University of Wollongong and the Kiama Municipal Council have had the foresight and the planning to really embrace the NBN and to build the opportunities of the NBN into their core processes and their core means of servicing their communities and servicing their students. Changes like this take time. They take time to bed-in, especially, and planning for complex and large institutions or organisations is often several years long. It is important that we ensure bodies such as schools, universities, hospitals, councils and businesses across Australia are informed and engaged early so that they can build the opportunities of the NBN into their own strategies and into their own plans.<sup>63</sup>

2.64 The NBN Co conducted a series of information sessions in first release sites that focussed on the sectoral benefits of the network, including events in:

- Kiama for health services
- Brunswick for small business and innovation

---

61 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

62 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 45.

63 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

- Townsville for tele-health
  - Willunga for education.<sup>64</sup>
- 2.65 Video case studies were also placed on the NBN Co's website and online channels with testimonials from businesses, education providers, health services and individual home-users.<sup>65</sup>
- 2.66 The Shareholder Ministers' Performance Report also stated that preparations were underway for greater public outreach campaigns on the sectoral benefits arising from the NBN rollout, commencing with the education sector. The Performance Report also stated that a campaign would be launched in 2012 to 'generate interest in, and build understanding of, the NBN'.<sup>66</sup>
- 2.67 A challenge for the NBN Co and all levels of government will be to engage communities that are hesitant to begin developing their systems. In this respect, the Berrigan Shire Council commented that at present as it had not yet been given an expected NBN rollout start date for the area and was not 'excited' about the NBN rollout. The Berrigan Shire Council stated:
- The dates seem to be a little bit far away for us to get excited. Even for me in my role at council and looking after our own council's internet connection, it is too distant and too vague for us to start to think about what we can do. As soon as we get a fibre rollout date we might look a bit more closely at it. But we are still waiting.<sup>67</sup>
- 2.68 The Australian Retailers Association (ARA) commented on the need for coordination and joint-initiatives for public engagement activities that will prepare consumers, businesses and governments alike to become e-ready. The ARA stated:
- I think it is a job for both of us. It is something we have been in discussion about with a list of ministers. ... We know that growth in the online sector has had a significant impact on retailers in regional areas. We know that many of those regional communities and retailers within those communities want to access the global market through things like the NBN but they are lacking knowledge about how to do that. Many of them literally do not

---

64 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 7.

65 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 7.

66 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 7.

67 Mr Matthew Hansen, Director, Corporate Services, Berrigan Shire Council, Transcript of Evidence, Sydney, 16 April 2012, pp 22-23



know how to set up a webpage. It is important to engage with all levels of government with this.<sup>68</sup>

- 2.69 The Australian Communications Consumer Action Network (ACCAN) welcomed the NBN Co's engagement with consumer and peak industry groups in the development of public education activities.<sup>69</sup> The ACCAN stated:

...we are very pleased that there is a proposal now for a quarterly high-level consumer round table. That issue came up when we gave evidence to the joint committee in 2011. This request has been acted on by the NBN Co and the wheels are now in motion to have our first meeting in June [2012]. We welcome this opportunity because we believe it will contribute to making NBN Co's public information activities more effective and also that it will give the opportunity for the community to have direct input into the NBN rollout.<sup>70</sup>

- 2.70 Further, the ACCAN was of the view that 'it is critical for the NBN Co's information activities to be conducted properly with suitable strategies for specific community sectors.' The ACCAN also stated:

An effective example has been the community information campaign for the Digital TV switch-over. Accordingly, the purpose of the Consumer Reference Group will be to bring relevant issues and questions that arise in the community to NBN Co's attention, and also to ensure NBN Co's public education activities are done in the best possible way. Having input from a cross-section of peak bodies on a regular basis we hope will help to make sure the information on the NBN rollout, and transition from copper to the NBN, reaches all parts of the Australian community that it needs to reach.<sup>71</sup>

- 2.71 As part of earlier efforts to improve community engagement and education about the NBN rollout and changes to telecommunications services, the ACCAN advocated that a number of peak bodies be included in a round table meeting of the 'Consumer Reference Group'. The NBN Co arranged for this meeting to be held in June 2012.<sup>72</sup>

---

68 Mr Heath Michael, Director, Policy, Australian Retailers Association (ARA), Transcript of Evidence, Sydney, 16 April 2012, pp 26-27.

69 Ms Teresa Corbin, Chief Executive Officer, Australian Communications Consumer Action Network (ACCAN), Transcript of Evidence, Sydney, 16 April 2012, p. 1.

70 Ms Corbin, ACCAN, Transcript of Evidence, Sydney 16 April 2012, p. 1.

71 ACCAN, *Submission 11*, p. 1.

72 ACCAN, *Submission 11*, p. 1.

## Ongoing Community and Industry Concern

- 2.72 The NBN Co gave evidence of its work in engaging communities in the NBN Rollout. The NBN Co stated:

The work that we do on the ground with communities is just as crucial – working with councils, local businesses, schools and chambers of commerce to ensure that as we start the rollout in their area they are not only informed but also involved. We use several means to do this. We have built demonstration facilities, including our discovery centre in Melbourne, to give people a tangible sense of the equipment in the in-home and the in-business experience of the NBN.<sup>73</sup>

- 2.73 While the NBN Co and Shareholder Ministers have outlined the programs and initiatives being implemented as part of the NBN education campaigns, the committee received evidence of the current level of NBN information in rural and regional communities.

- 2.74 The Regional Development Australia Northern Inland NSW (RDANI) highlighted there is a limited understanding of the NBN in regional areas and a coordinated approach to connecting to the NBN is needed. The RDANI NSW commented:

People just do not know which way to go. Once they actually find out the information, they really take to it. When we went from dial-up to ADSL we had a similar problem. The take-up rate for ADSL was very low, but all of a sudden it took off when people realised what was happening. With NBN, we need to apply a much more coordinated approach where we get state and local governments, businesses and chambers of commerce to work on this.<sup>74</sup>

- 2.75 In reference to a recent survey conducted by the Australian Farmers' Federation in relation to the NBN satellite service offered to rural areas the ACCAN commented there needs to be better dissemination of NBN information to such areas. The ACCAN stated:

The New South Farmers Association did a survey, and I gather from that that there are a lot of farmers among whom there is a pent up demand to get off inferior satellite service offerings that they are using now, but they are not necessarily aware that the

---

73 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 46.

74 Mr Alun Davies, NBN Coordinator, Regional Development Australian Northern Inland New South Wales (RDANI NSW), Transcript of Evidence, Sydney, 16 April 2012, p. 18.

NBN's interim satellite offerings are out there. So I think there is some need for better dissemination of the information that this interim service offering is out there now. Perhaps it is a case of ISPs not really promoting it because people are on contracts and it is not really in their interest. We are not sure what the reason is, but there needs to be better dissemination of information to the rural constituency.<sup>75</sup>

2.76 Concerns were also raised by fixed-wireless and satellite communities that they will receive an inferior service in comparison to those in the fibre-footprint. In some cases, this was regarded as a 'backwards' step.<sup>76</sup> This evidence is further discussed in Chapter 5, in addition to the NBN Co's policy for extending the fibre footprint and the point at which communities are drawn into the extension design process.

2.77 Vodafone Hutchison Australia (Vodafone) stated that over the 'migration period' a clear and comprehensive communication plan which includes the competition considerations is warranted. Vodafone stated:

It is vital that there is a clear and comprehensive plan, which NBN Co leads and develops, that involves the community and the telco industry in providing the right information to consumers – that is, things like: what to expect when a connection occurs; when the migrations will occur; and giving practical advice about how it will take place. We need to let people know, 'Generally there will not be a change of experience; it is just a different way of delivering the same services you receive, plus a whole lot of great new opportunities.'<sup>77</sup>

2.78 Vodafone also stated that NBN Co's communication plan needs to inform consumers that the NBN presents a wide range of new choices. Vodafone stated:

There is a practical element of reassuring people in that communication plan, but there also needs to be a pro-competition part of it. It should not just be about saying to consumers, 'Don't worry, everything will be the same.' That would be a missed opportunity. It also needs to be saying to consumers: 'The NBN presents a wide range of new choices for you. There are new

---

75 Mr Jonathan Gadir, Senior Policy Adviser, ACCAN, Transcript of Evidence, 16 April 2012, Sydney, p. 2.

76 Mr Nathan Axelsson, Executive Officer, RDANI NSW, Transcript of Evidence, Sydney, 16 April 2012, p. 18.

77 Mr Matthew Lobb, Vodafone, Transcript of Evidence, Sydney, 16 April 2012, p. 10

entrants in the market that you should consider, because they might offer a solution that better meets your needs.' So there is a practical set of communications about reassuring people and giving them the right information, but there also needs to be a pro-competition set of messages.<sup>78</sup>

## Additional Issues

### Delay of Answers to Questions on Notice

2.79 Both the committee's First and Second reports contain substantial comment on the significant delay experienced in receiving answers to questions on notice from the NBN Co and the DBCDE, and the subsequent delay this caused consideration of significant matters associated with reviews.

2.80 In its First Report, the committee 'strongly urged' the NBN Co and the DBCDE to give greater priority to answering questions on notice with the aim of assisting 'the committee to undertake its role as intended by the Parliament.'<sup>79</sup>

2.81 In its Second Report, the committee further commented on the delay experienced in receiving answers to questions on notice from the NBN Co and the DBCDE.

2.82 In addition, the committee commented on the quality and quantity of information contained in the answers to questions on notice that were received. The committee stated:

For a number of answers, it seemed that only material that was already available publicly, or evidence already taken at public hearings, was provided.<sup>80</sup>

2.83 The committee subsequently recommended:

That the Department of Broadband, Communications and the Digital Economy review its existing clearance processes for providing answers to questions on notice with the aim of

---

78 Mr Matthew Lobb, Vodafone, Transcript of Evidence, Sydney, 16 April 2012, p. 10

79 JCNBN, August 2011, *Review of the Rollout of the National Broadband Network: First Report*, Commonwealth of the Parliament of Australia, pp 20-21.

80 JCNBN, December 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, pp 31-32.

providing answers to questions taken on notice where possible on the notified due date or within a reasonable timeframe thereafter.<sup>81</sup>

- 2.84 In response to the committee's recommendation, the Shareholder Ministers stated:

The Government supports this recommendation. The department does prioritise its clearance processes for responding to Joint Committee on the National Broadband Network questions on notice. However, depending on the complexity of the question, on some occasions additional time will be required for detailed analysis and or wider consultation prior to finalising a response.<sup>82</sup>

### Timeframe for Receipt of Performance Report

- 2.85 In its First Report the committee was unable to include information on NBN rollout statistics because it did not receive the relevant quantitative or qualitative information from the NBN Co and Government in time.
- 2.86 As a result, the committee (which was required by the Parliament to report by the end of August 2011), reported without this information, on the evidence and information it had received and collected from the wider community as part of its First Review.
- 2.87 For the main purpose of informing committee reviews, and in an effort to receive regular reports on the NBN rollout, in its First Report the committee recommended:

That the NBN Co together with the Department of Broadband, Communications and the Digital Economy, commencing for the first quarter 2011-2012, provide a six-monthly report on the progress of the rollout of the National Broadband Network, using established Key Performance Indicators and performance measures, no later than three months before the committee is due to report to the Parliament.<sup>83</sup>

- 2.88 In its response to the committee's recommendation, the Shareholder Ministers stated:

---

81 JCNBN, December 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 32.

82 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 5.

83 JCNBN, August 2011, *Review of the Rollout of the National Broadband Network: First Report*, Parliament of the Commonwealth of Australia, p. 22.

- The government supports this recommendation and submitted its first report to the committee on 23 September 2011.
- The government will submit six-monthly reports to the Committee and adopt this reporting pattern on an ongoing basis. The reports will provide quantitative and qualitative advice outlining NBN Co's key performance information across the following areas:
  - ⇒ progress on the rollout
  - ⇒ deployment and installation
  - ⇒ take up rates
  - ⇒ key financial information (profit and loss statement, balance sheet, cash flow statement, and cash flow reconciliation)
  - ⇒ quality of service including service levels and faults
  - ⇒ industry and consumer consultation including complaint handling
  - ⇒ issues associated with health, safety and environment.
- The information provided to the Committee will become more meaningful as the rollout progresses and more premises are connected and as NBN Co's operating and business systems come online during 2012.<sup>84</sup>

2.89 Taking into consideration the recommendation and the Government's support of it, the second Government Six-Monthly NBN rollout Performance Report was due to the committee by 31 March 2012.

2.90 The Government's second performance report was subsequently sent to the committee on 9 April 2012 and formally received on 10 April 2012. The committee's only hearing on the NBN rollout performance was scheduled and held a week later on 16 April 2012.

## Concluding Comments

### Revised NBN Rollout Targets and NBN Co Corporate Plan

2.91 The way information has been presented in the Government's second performance report, for the purpose of this review, does not allow it to be compared with the results in the Government's first performance report. This is despite the Shareholder Ministers' continuing statements that

---

84 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 4.

information contained in performance reports will become more meaningful as the rollout progresses.

- 2.92 The NBN Co has stated that as a result of the significant changes to the assumptions underlying the targets contained in its corporate plan, it will be releasing a new corporate plan. As a result, the NBN Co stated that 'it is neither reasonable nor valid to compare NBN Co's performance with the deployment forecasts' included in the current 2011-2013 corporate plan.
- 2.93 Instead, the NBN Co stated that it is 'perfectly legitimate' to measure its performance against announcements made in its 12-month and three year NBN rollout schedules.
- 2.94 The NBN Co also stated that 'if there are any future policy changes, the assumptions in the' new corporate plan would have to change. This would mean that the targets are rendered unreliable for any future corporate plan as soon as there is any change to the NBN rollout environment.
- 2.95 In addition, as the 12-month and three year schedules published on the NBN Co website are subject to change according to the pace of design, construction and completion of the NBN, the associated targets will undoubtedly be in a state of constant flux. This means that the NBN rollout cannot possibly be measured in terms of progress against specific targets over an acceptable timeframe which can then be compared between periods or years.
- 2.96 The committee is aware that the NBN Co is still in the early stages of the NBN rollout and that as a result of delays with the Telstra Agreement, change to the number of PoIs and changes to the Greenfields policy, that undoubtedly there has been disruption and delay to the NBN rollout.
- 2.97 As a result of the NBN Co's statements, that it cannot be held accountable for its own corporate plan targets, and that revised targets will be subject to change without warning, this will mean there is no way of gauging the progress of the NBN rollout in relation to costs expended on the public infrastructure project.
- 2.98 The committee does not find it meaningful to be provided with data on how many premises have been passed or premises made active between periods or years without any kind of target or benchmark on which to compare this data.
- 2.99 The committee also understands that there is now a new KPI of 'work under way' used to describe a new NBN rollout statistic, but does not understand how this KPI adds any real meaning to the status of the progress of the NBN rollout.

- 2.100 The committee finds this approach by the NBN Co disappointing and contrary to the principles of transparency and accountability required of public agencies, especially one responsible for the largest public infrastructure project ever funded by an Australian Government.
- 2.101 The committee disagrees that current KPIs such as 'cost per premises passed or activated and take up rates broken down into levels of service is not meaningful at this point in time.'
- 2.102 The committee requests the Government provide KPI information in the performance report against targets in the Business Plan for the performance report on homes passed, homes connected, and services in operation.

#### NBN Co Financial Result

- 2.103 The committee notes the NBN Co's 2011-2012 half yearly financial result as presented in the Performance Report reflects that the company is in start-up mode, and while the NBN Co has commenced collecting a small amount of revenue for services, has again experienced a consolidated loss.

#### Community Consultation

- 2.104 The committee notes that the Government and the NBN Co have commenced or delivered several activities under core communication goals.<sup>85</sup> The importance of demonstrating equipment as a method of informing the public was discussed. However, the demonstration of equipment does not itself lead to genuine engagement with community, nor does it demonstrate community involvement in the NBN rollout.
- 2.105 The NBN Rollout Schedule website contains information on rollout timeframes only available to those residents in areas identified to commence work in the next three years. For residents living outside those communities, no information is currently available. Preliminary engagement with outstanding communities on anticipated timeframes for the NBN rollout announcements needs to be factored into the public education activity.
- 2.106 As discussed in Chapter 5, the NBN Co's activities in fixed-wireless and satellite service areas should also clarify for residents the continuing provision of voice services on existing infrastructure.
- 2.107 The committee welcomes evidence of the NBN Co's engagement with consumer and peak industry groups through the meeting of the
- 

85 Mr Cooney, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 45.



‘Consumer Reference Group’ in the development of public education activities.

- 2.108 The committee believes it is important that these stakeholder groups are appropriately consulted and that their capacity to provide feedback to the NBN Co is supported.
- 2.109 In addition, involving the experience of relevant community and business stakeholder groups will also be valuable in the development of a telecommunications-migration awareness campaign following the progressive decommissioning of the copper network.

### Public Engagement Activities

- 2.110 The committee believes that national leadership is required for the coordination of public engagement activities relating to the NBN rollout. National leadership for public education and engagement activities is important to ignite the design and development of innovative projects that will maximise the capability of the NBN. If Australia is to maximise productivity increases, clarity and leadership are vital. This may require more detail than general statements of ‘enhanced productivity’.
- 2.111 By doing so, Australians will be in a better position to take full advantage of the economic and productivity gains which may be achieved through the NBN. In this regard, governments at all levels may be able to learn from the experiences of other countries in their delivery and utilisation of national networks. Clearly there will be unique challenges that will distinguish Australia’s approach through the NBN.
- 2.112 The committee is also of the view that these challenges will also create new opportunities for innovation and connectivity.

### NBN Co Website

- 2.113 The NBN Co website is designed to be the central information portal for access seekers and consumers alike. Although significant quantities of information are provided on the website, from a consumer’s perspective, vital information should be readily accessible and centrally located.
- 2.114 The committee believes improvements could be made to consolidate the rollout information and the forecasted dates for the commencement of work and the activation of services. The interactive three year rollout map is a user-friendly search tool that could be enhanced by providing other key information such as:
- The date of the commencement of work in service areas;

- The progress of the rollout within the individual service area (expressed as a percentage);
- Exact date of completion of the NBN rollout in the service area; and
- Information about how to connect to the network and a list of retail service providers offering connection services in that area.

2.115 The committee notes that much of this information is available on other areas of the NBN Co's website. However, a consolidated access point providing this information is likely to assist the migration of customers throughout the staggered rollout of the NBN.

#### Delay of Receiving Review Information

2.116 This is the committee's fourth report since its appointment in March 2011. To date the committee has held ten public hearings, seven of which the NBN Co or the departments have appeared at. At these hearings, the committee placed questions on notice.

2.117 The committee has found that there have been occasions when it has placed questions on notice during a public hearing, and answers to those questions have referred the committee to media releases or already published documents issued in the interim. It would be of assistance to the committee in its oversight function if these responses to questions asked were thorough, comprehensive and prioritised.

2.118 The committee has twice previously commented on the delays it has experienced in receiving answers to questions taken on notice by the NBN Co and the departments. The committee has also commented on the timeframe it requires for receiving the Government's NBN rollout performance report. The due dates and timeframes are put in place to enable the committee to receive information that it requires to report to the Parliament.

2.119 The committee is responsible for reviewing the six monthly rollout of the NBN and takes this responsibility seriously given the large public expenditure and time taken to enable the NBN to be completed.

2.120 In the Government's response to the Second Report, the Shareholder Ministers have stated that they are supportive of the committee's recommendation to review the DBCDE process for providing answers to questions on notice to the committee. However, the Government then places a caveat on this statement by explaining that it will take additional time to answer questions if required.

- 2.121 The committee has again recommended that internal processes for the approval of answers to questions on notice be changed to enable it to place emphasis on providing information to the committee by the due date.

### **Recommendation 1**

- 2.122 **The committee recommends that the NBN Co and the Department of Broadband, Communications and the Digital Economy review the *efficiency* of their current clearance processes for providing answers to questions on notice so that:**
- Responses to the majority of questions placed on notice by the Joint Committee on the National Broadband Network can be received by the due date;
  - Its answers to parliamentary committees are consistent, thorough and complete, so that ambiguities are minimised in public debate.

### **Recommendation 2**

- 2.123 **The committee recommends the Government include key performance information in its six-monthly National Broadband Network performance report, listing and detailing: (1) established Business Plan targets and (2) actual results for:**
- Homes passed;
  - Homes connected; and
  - Services in operation.

**Recommendation 3**

2.124 The committee recommends that the NBN Co as soon as possible, provide further key information on its website in a user-friendly format, and also include this information in the six monthly Shareholder Ministers' Performance Report. This information should include:

- The date of the commencement of work in individual service areas;
- The progress of the rollout in each service area (expressed as a percentage);
- The exact date of completion of the National Broadband Network rollout in each service area;
- Information about how to connect to the network; and
- A list of retail service providers active in each service area.

**Recommendation 4**

2.125 The committee recommends that the Department of Broadband, Communications and the Digital Economy, in the development of future public education activities, undertake a study of similar international networks, with a view to adoption of:

- International best practice;
- Strategies employed by governments and companies building these networks; and
- Concrete examples of how this technology is being used and maximised by individuals, business and governments.

## Regulatory and Pricing Issues

### Introduction

- 3.1 The first and second reviews included examination and discussion of key regulatory matters affecting and enabling the rollout of the National Broadband Network (NBN). Matters reviewed included the: Binding Definitive Agreements between Telstra Corporation (Telstra) and Optus, the NBN Co Special Access Undertaking (SAU) and Wholesale Broadband Agreement (WBA).
- 3.2 This chapter provides an update on the regulatory components enabling the NBN rollout as outlined above. In addition, e-readiness of small business is briefly discussed.
- 3.3 The Shareholder Ministers' Performance Report (the performance report) includes an update on the status of regulatory matters pertaining to the NBN rollout for the period ended on 31 December 2011. The Performance Report also includes an update of these matters for the period from 1 January to 31 March 2012. Where relevant the updated information has been included in this chapter.

### Binding Definitive Agreements with Telstra and Optus

#### Telstra Agreement

- 3.4 In addition to including interim arrangements for immediate access to Telstra infrastructure, the Binding Definitive Agreement between NBN Co

and Telstra (the Telstra Agreement) assists the NBN rollout in two other main ways. These are, it assists to:

- Avoid infrastructure duplication and ensure the efficient fibre network rollout, it grants NBN Co access to Telstra facilities and infrastructure over a minimum period of 35 years.
- Provide for the progressive disconnection of Telstra's copper and Hybrid Fibre Coaxial (HFC) customers (excluding HFC pay television customers), and NBN Co will be Telstra's preferred fixed line network.<sup>1</sup>

- 3.5 To take effect, the Telstra Agreement<sup>2</sup> was required to satisfy nine conditions precedent (CP). These CP included: Telstra shareholder approval, and the Australian Competition and Consumer Commission (ACCC) acceptance of the Telstra Structural Separation Undertaking (SSU) and an accompanying final Migration Plan.
- 3.6 The Telstra Agreement received shareholder approval on 18 October 2011. Under the *Telecommunications Act 1997* (Cth), the ACCC was tasked with consideration of Telstra's draft Migration Plan. Given its significance in facilitating structural reform in the Telecommunications Sector, although not required, the ACCC also reviewed Telstra's SSU.
- 3.7 The ACCC consideration and approval of the SSU and accompanying (customer) migration plan was the final CP remaining to be satisfied before the Telstra Agreement could come into force.
- 3.8 To meet the terms of the Telstra Agreement, ACCC consideration of the SSU and draft Migration Plan would have to be completed before 20 December 2011 or otherwise extended by agreement.
- 3.9 As the ACCC consideration of the Telstra SSU was delayed beyond 20 December 2011, the terms of the Telstra Agreement were extended until 30 March 2012 by agreement with the respective parties.<sup>3</sup>

---

1 Joint Committee on the National Broadband Network (JCNBN), November 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 37.

2 The Telstra Agreement was negotiated between the Government, NBN Co Limited (NBN Co) and Telstra over a two year period. Under the NBN Co Corporate Plan, the Telstra Agreement was expected to be completed and approved by the Australian Competition and Consumer Commission by 30 June 2011.

3 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 6.

## Telstra's Structural Separation Undertaking and Draft Migration Plan

- 3.10 Telstra's SSU was lodged with the ACCC on 29 July 2011. On 30 August 2011, the ACCC issued a discussion paper and sought industry comment.
- 3.11 In addition to outlining the terms of the SSU and draft migration plan, the discussion paper highlighted concerns about the SSU which centred on interim equivalence and transparency measures, both of which were required under legislation.
- 3.12 On release of the discussion paper, Telstra 'engaged in constructive discussions with the ACCC and industry', to resolve ACCC concerns in regard to the Agreement.
- 3.13 The timeframe for the completion of the Agreement was made by the respective parties before the expiry date. Telstra lodged a revised SSU with the ACCC on 9 December 2011. The revised SSU included 'substantially improved interim equivalence and transparency commitments intended to address ACCC and industry concerns.'
- 3.14 The ACCC released a discussion paper on the revised SSU and sought industry comment by 13 January 2012.
- 3.15 Following industry consultation, on 28 February 2012, the Prime Minister and the Minister for Broadband, Communications and the Digital Economy announced that the ACCC had approved the Telstra SSU.
- 3.16 Approval of the Telstra SSU would enable the NBN Co to use existing Telstra infrastructure and migrate Telstra customers onto the NBN, thereby reducing the costs and time taken to rollout the NBN.
- 3.17 The structural separation of Telstra would also require Telstra to change its corporate structure. This would have the effect of reducing the market power of Telstra and together with the construction of the NBN deliver microeconomic reform to the Australian telecommunications industry.
- 3.18 The aim of the Government's reform to the telecommunications sector is to deliver greater competition for industry. Through improvements in economic efficiency, sector reform would deliver better outcomes for the end consumer in regard to price and service of telecommunication products than previously available under Telstra.<sup>4</sup>

---

4 Gillard J (Prime Minister) and Conroy S (Minister for Broadband, Communications and the Digital Economy), 2012, *ACCC final approval of structural separation of Telstra*, joint media release, 28 February.

- 3.19 Under the Financial Heads of Agreement and the Telstra Agreement, (between Telstra and the NBN Co), in the longer term, Telstra's copper and HFC networks will be progressively decommissioned and customers migrated to the NBN, with the NBN Co the wholesale provider of services over the NBN.

### Timeframe for Completion

- 3.20 The NBN rollout targets in the NBN Co 2011-2013 Corporate Plan are based on the assumption that negotiations and regulatory processes relating to the Telstra Agreement would be completed by the end of June 2011.<sup>5</sup>
- 3.21 The Telstra Agreement came into force on 7 March 2012, just over eight months after the expected date.
- 3.22 In response to the committee's recommendation to publish a detailed account of the impacts on timing and cost of the NBN, as a result of the time taken to complete the Telstra and Optus Agreements<sup>6</sup>, the Government stated:

While the agreement with Telstra was extremely complex and took longer than first anticipated, the government is confident that these agreements will protect the interests of Australian taxpayers and support the NBN rollout by providing access to existing infrastructure, minimising overhead cabling and reducing the overall costs of the NBN. Further, NBN Co will proactively manage the construction timetable over the life of the project to minimise and overcome any delays.<sup>7</sup>

### NBN Rollout Progress since Telstra Agreement Approval

- 3.23 Since the Telstra Agreement 'became unconditional and commenced', the following milestones in support of the NBN rollout have occurred:

---

5 NBN Co, *Corporate Plan 2011-2013*, December 2010, p. 19.

6 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 7.

7 Recommendation 3 of the First Report also included the Australian Competition and Consumer Commission (ACCC) decision to increase the points of interconnect from 14 to 121. Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*.



- 'Delivery of the transit schedule in line with the initial roll out plan, with 26 Fibre Access Nodes... and aggregation node sites handed over from Telstra as of 31 December 2011.
- Development of processes, systems and methodology to implement the Telstra Definitive Agreements.
- Completion of [operation] and maintenance manuals and technical specifications for each infrastructure type under the Infrastructure Services Agreement with Telstra.
- The required joint governance committees, and associated forums, meet at least once per month.
- Significant work has been undertaken on end-to-end processes for the deployment.'<sup>8</sup>

## Optus Agreement

- 3.24 The \$800 million Binding Definitive Agreement between the NBN Co and Singtel Optus (the Optus Agreement) was not included under the NBN Co 2011-2013 Corporate Plan.
- 3.25 The Optus Agreement, like the Telstra Agreement, requires the decommissioning of the Optus HFC network and migration of its customers to the NBN in line with the pace of the NBN rollout.
- 3.26 During the second review, Optus advised that it would retain only that component of its fibre network used for its mobile backhaul and other corporate customers.<sup>9</sup>
- 3.27 Also at the time of the second review, finalisation of the Optus Agreement was dependent on ACCC approval and confirmation of tax treatments.
- 3.28 The Shareholder Ministers provided an update on matters being progressed as part of the Optus Agreement. The following key matters were progressed over the review period were:
- 'ACCC Approval (condition precedent): The application to the ACCC for authorisations for the implementation of the Optus HFC Subscriber Agreement.

---

8 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 6.

9 JCNBN, November 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 46.

- Implementation Plan: On the 17 November 2011, NBN Co and Optus agreed the Optus HFC Subscriber Agreement Implementation Plan.<sup>10</sup>

3.29 The ACCC commented that consideration of the Optus Agreement was one of two major pieces of regulatory work relating to the NBN, yet to be completed. The ACCC stated that it was in a position to finalise its consideration of the Optus Agreement in the specified period.<sup>11</sup>

3.30 On 28 May 2012, the ACCC ‘issued a draft determination proposing to grant authorisation’ for the Optus Agreement.<sup>12</sup>

3.31 The ACCC outlined the main public benefits of the Optus Agreement. The ACCC stated the Optus Agreement will:

  - ‘Avoid the cost of operating the Optus HFC network to provide a service the NBN is also able to provide; and
  - Deliver a lower cost HFC subscriber migration to the NBN.’<sup>13</sup>

3.32 In making its determination, the ACCC took into consideration ‘a number of unique factors’ serving to reduce the competition and performance detriments which it also outlined.<sup>14</sup>

3.33 The ACCC stated these unique factors are:

  - The Optus HFC footprint is unlikely to be extended beyond its current 1.4 million homes, so its subscriber base is unlikely to also grow beyond 400 000 broadband subscribers.
  - Optus is unlikely to provide the same large investment to enable its subscribers a faster broadband product through its HFC network than is currently available. ‘The Optus HFC network will, therefore, only provide a close substitute to the NBN for customers seeking broadband services that will be at the lower end of the range of services that the NBN will support’.

10 Shareholder Ministers, ‘Performance Report to 31 December 2011’ *Submission 12*, p. 6.

11 Mr Ed Willett, Commissioner and Chair, Communications Committee, Australian Competition and Consumer Commission (ACCC), Transcript of Evidence, Sydney, 16 April 2012, p. 68

12 Under the *Competition and Consumer Act 2010* (Cth), before making a final determination, the ACCC must ‘prepare a draft determination in relation to an application for authorisation. The purpose of this draft determination is to test the ACCC’s views with the applicant and interested parties.’ ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.

13 ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.

14 ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May 2012.

- 'Over time, HFC customers demanding higher speed services are likely to be migrated by Optus to the NBN. There are a range of views on how quickly Optus' current HFC customers will want such higher speeds. While the ACCC did not form a view on the future need for high speed broadband, it did accept that the Optus HFC network would be uneconomic to operate once a critical mass of customers were lost.'<sup>15</sup>

3.34 Further, the ACCC stated:

...the HFC Agreement removes a potentially significant fixed line competitor to the NBN in Brisbane, Sydney and Melbourne. Competitive pressure from the Optus HFC network may have resulted in positive outcomes notably prompting NBN Co to improve its performance.<sup>16</sup>

3.35 However, the ACCC also commented that:

...the regulatory approach which will ultimately apply to the NBN is intended to provide strong incentives for NBN Co to promote utilisation of the NBN and to be responsive to customer needs concerning speeds and other aspects of service quality.<sup>17</sup>

## Future Use of Remaining Copper Network

3.36 For both Telstra and Optus, the question of the possible use of any existing infrastructure network arose throughout the Second and Third reviews.

3.37 As part of the second review, Optus stated that as part of its agreement with the NBN Co, that it had 'effectively made a sale of ... [its]...HFC network and capacity to NBN Co and agreed a migration strategy across to NBN Co.'<sup>18</sup>

3.38 Alternatively, Telstra still owns a proportion of the existing copper network (copper access network) which has not been included under the Telstra Agreement and so will not be decommissioned. This network has

---

15 ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.

16 ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.

17 ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.

18 JCNBN, November 2011, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 46.

been valued at between \$20 and \$33 billion.<sup>19</sup> Telstra would not confirm the value of its copper network and stated 'we do not disclose ... the valuation of our copper network.'<sup>20</sup>

- 3.39 Telstra also commented that in the interest of its shareholders and a possible change in Government policy that it would again be prepared to negotiate for the sale of its existing copper network in the future. Telstra stated:

Telstra has shown in the last couple of years that it is able to deal with the government policy of the day and negotiate in a way that I think helps the government get its objectives while protecting shareholders, customers and employees' interests. If there is a change in policy... we would do exactly the same thing. We would sit down and seek to negotiate in a way that protected shareholder, employee and customer interest but also allowed the government to achieve the policy objectives that it specifies.<sup>21</sup>

## Other

- 3.40 The Australian Communications Consumer Action Network (ACCAN) was concerned about the initial NBN-based Telstra offers, where consumers will keep a copper line for telephone services and also receive internet services through a fibre network. The ACCAN stated that this arrangement would have a cost implication and create an inconvenience for consumers. The ACCAN stated:

This on the whole is likely to inflate the price of a service because consumers would continue to pay a line rental fee to Telstra, when both phone and internet services could potentially be operating through the NBN box. It also means customers who take up these offers will have the inconvenience of doing a 'switch-over' twice – once when the NBN box is installed for their internet, and again at a later date when they need to connect their phones to the NBN box.<sup>22</sup>

---

19 Conroy, S (Minister for Broadband, Communications and the Digital Economy), 2012, *Turnbull adds lazy billions to Abbott's budget woes*, media release, 28 February.

20 Dr Tony Warren, Group Managing Director, Corporate Affairs, Telstra Corporation (Telstra), Transcript of Evidence, Sydney, 16 April 2012, p. 38.

21 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 39.

22 Australian Communications Consumer Action Network (ACCAN), *Submission 11*, p. 4.

## NBN Co's Special Access Undertaking

### Update

- 3.41 Following a two-year industry engagement process, the NBN Co's SAU was lodged with the ACCC for review<sup>23</sup> on 5 December 2011.
- 3.42 The SAU covers the 30-year period of the NBN Co Corporate Plan (2040) with a mid-term review.<sup>24</sup>
- 3.43 Under the SAU, wholesale prices for key products would be fixed for a five year period ending on 30 June 2017. Price increases after this timeframe would be less than inflation 'to ensure real wholesale price reductions over time.'<sup>25</sup>
- 3.44 On 19 and 20 December 2011, and 17 January and 3 March 2012, the NBN Co provided supporting documentation to its SAU, (outlining the context and rationale for commitments made in the SAU) to the ACCC. This included: 'Advice on NBN Co Ltd's Special Access Undertaking' by Synergies Economic Consulting and Analysis Mason's Review of the Efficiency and prudence of NBN Co's fibre and wireless network design.
- 3.45 In its Second Report, the committee urged the NBN Co to lodge its SAU<sup>26</sup> with the ACCC for consideration without further delay. The committee also suggested that retail service providers (RSPs) not be asked to sign a WBA<sup>27</sup> until the SAU is lodged with the ACCC. The impetus of this suggestion was to provide a level of certainty for RSPs for various conditions provided under each WBA,<sup>28</sup> especially price and recourse to the ACCC.

---

23 The ACCC is required to undertake a public consultation process as part of its review of the NBN Co Special Access Undertaking (SAU). NBN Co, *Special Access Undertaking Overview Paper*, 5 December 2011, p. 1.

24 NBN Co, *Special Access Undertaking Overview Paper*, 5 December 2011, p. 3.

25 NBN Co, 2011, *Bringing Broadband to Life*, media release, 5 December; NBN Co, 2012, *Special Access Undertaking*, media release, 17 January.

26 The SAU includes the 'key price and product aspects of access to NBN Co's fibre, wireless and satellite networks' as well as a number of 'non-price terms and conditions.' NBN Co, *Corporate Plan 2011-2013*, p. 106.

27 The Wholesale Broadband Agreement (WBA) outlines the contractual arrangements relating to NBN commercial service delivery by Retail Service Providers in line with broad provisions contained in the SAU. The SAU also 'contains commitments in relation to changes to the WBA over time.' NBN Co, *Special Access Undertaking Overview Paper*, 5 December 2011, p. 5

28 The original term of the WBA was for a period of five years.

3.46 While the NBN Co is not required to submit an SAU to the ACCC, the ACCC stated that it is in the NBN Co's interest to do so. The ACCC explained:

... we have a legislative scheme that sets precedents in order of conditions and terms of access first of all being set by commercial agreement, secondly under an SAU, as you described, and thirdly under determinations that we make or binding rules of conduct that we make. So I think it is in NBN Co's interest. We certainly see some advantages in them settling with us an undertaking to set at least a framework of terms and conditions for the provision of their services. That would not necessarily rule out determinations on matters that are not covered under that SAU in future but, for the terms and conditions that are actually covered by that SAU, the SAU would determine how those terms and conditions are provided.<sup>29</sup>

## Recourse to the Australian Competition and Consumer Commission

3.47 At the time of the second review, concerns were raised about ACCC recourse to capture pricing terms and conditions under the SAU and its 30-year length.

## Special Access Undertaking Terms and Conditions

3.48 As part of the Third Review, Vodafone Hutchison Australia (Vodafone) raised concerns about when the ACCC may be able to intervene if there is disagreement between industry and the NBN Co. Vodafone stated:

It is very important that ACCC plays a key role when industry and NBN have a disagreement about what the appropriate arrangements should be. At the moment that is still a work in progress. There are some ambiguities about when and how the ACCC can play a role. We understand NBN's point that there should be some certainty about the way the ACCC plays a role but when there are disagreements, when the industry has new sets of needs and the NBN disagrees with the way that industry wants to take things, then the ACCC with its pro-competition focus should play a role in overseeing and making, in some cases, the final call about what is the appropriate commercial arrangement. That again is a work in progress. We are engaging with NBN about that. They have set up quite an extensive consultation program

---

29 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 68.

over the next six months about the terms and conditions of supply.<sup>30</sup>

- 3.49 In regard to the SAU component of the ACCC's role in monitoring NBN Co prices, the ACCC stated that it was in negotiation with the NBN Co to ensure there is sufficient regulatory oversight of key products. Following this negotiation, the ACCC would then consult with industry on the agreed terms of the SAU. The ACCC stated:

This is one area that I think is the subject of quite deep and intensive discussions with NBN Co. The broad framework that we are looking to apply is one where there is sufficient regulatory oversight of key products that NBN Co is disciplined by that regulation to provide all its services on reasonable terms and conditions. We think there is some work to do on the current undertaking to get to that position, but we will need to pursue those discussions first and then engage in some industry consultation on whether what we are proposing or what NBN Co is proposing is sufficient to achieve that.<sup>31</sup>

### 30-year Term of Special Access Undertaking

- 3.50 Although consideration of the SAU is still underway, the ACCC commented that recourse to the commission would not be prevented under the 30-year term of the SAU. The ACCC stated:

...the very nature of trying to set in place arrangements that will extend over a 30-year period proposes its own challenges; there is no doubt about that. It is not an easy thing to do. At this stage we are leaving open the possibility that the things that are set in place for 30 years might be broad and sweeping in terms of principles rather than actual specific terms and that, within that framework, terms and conditions can be set or revisited on a more regular basis.<sup>32</sup>

- 3.51 The ACCC also commented that the 30 year lifespan of the SAU is not unusual. The ACCC explained:

This proposal has a long duration, but can I say at the outset that it is not usual for a greenfields start-up service provider to submit undertakings of this kind. I think this is probably the first one the

---

30 Mr Matthew Lobb, General Manager, Industry, Strategy and Public Policy, Vodafone Hutchison Australia (Vodafone), Transcript of Evidence, Sydney, 16 April 2012, p. 10.

31 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 70.

32 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 68.

commission has had to deal with, although we have in the past considered the possibility of greenfields applications being made by gas pipelines under the gas pipeline code. We have actually issued a greenfields gas pipeline code guideline for that eventuality. Rather than compare the approach that is being taken here with our usual course of business with access determinations or access undertakings or the like – and the usual course of business is an incumbent service provider with an established network that seeks or is obliged under the various legislation to submit to us terms and conditions for approval on how they will provide services – here we have a business who is seeking to invest in a new network and to set those terms and conditions before that network is complete. I think the relevant comparison would be with the sorts of approaches envisaged in our greenfields gas pipeline guideline, for example, which does envisage the sorts of approaches that are being adopted here – in other words, a long-term, at least, framework undertaking with perhaps more regular consideration of some aspects of those terms and conditions and seeking to establish upfront ways in which efficient costs for the provision of service will be established and how prices will be set.<sup>33</sup>

- 3.52 On the possibility of the SAU not receiving ACCC approval and what options would be available to the NBN Co if this occurred, the ACCC stated:

It is hard to say exactly what the commercial implications for NBN Co. would be. That would be a question for them, I think. But there would be some choices for NBN Co. at that point. They could resubmit their undertaking, seeking to address whatever concerns we expressed about their existing draft. Otherwise it would be likely, I think, that the commission would move to implement an access determination inquiry and as part of that process set interim terms and conditions through binding rules of conduct.<sup>34</sup>

---

33 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 69.

34 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 8.



## Wholesale Broadband Agreement

### Term of Wholesale Broadband Agreement

- 3.53 The NBN Co's WBA is a contract between it and RSPs which sets out the 'terms and conditions, for the delivery of commercial services over the NBN fibre network.'<sup>35</sup>
- 3.54 In response to industry concerns surrounding regulatory uncertainty in the absence of a SAU, the NBN Co announced that its interim WBA would change from a five-year to a 12-month term.<sup>36</sup> The ACCC commented:
- That was done at our instigation because there were concerns in the market that retailers might be in a position to, or be obliged to, enter into longer term agreements with NBN Co prior to regulatory settings being fully established – in particular, through setting of the SAU. So we expressed our concern to NBN Co. They agreed – as an interim measure, until we have time to go through the SAU processes – to offer 12-month services. That provides retailers with the opportunity to renegotiate those contracts after regulatory settings are established.<sup>37</sup>
- 3.55 In addition, the ACCC stated that the 12-month term of the WBA enables:
- ... retailers to enter into those agreements, knowing that, if there is a change or adoption of regulatory settings that might cause them to rethink whether that deal is the deal they want to be in with NBN Co, they have the opportunity to renegotiate that agreement.<sup>38</sup>
- 3.56 Following several rounds of industry consultation over a 12-month period, NBN Co released the final version of its WBA on 30 November 2011.<sup>39</sup>
- 3.57 As at 16 April 2012, 40 RSPs had signed a WBA with the NBN Co.<sup>40</sup>

---

35 NBN Co, 2011, *Wholesale Broadband Agreement*, media release, 30 November.

36 NBN Co, 2011, *Wholesale Broadband Agreement*, media release, 30 November.

37 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 70.

38 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 70.

39 NBN Co, 2011, *Wholesale Broadband Agreement*, media release, 30 November.

40 Mr Mike Quigley, Chief Executive Officer, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 45.

## Bundling and Pricing of Services

- 3.58 The NBN Co outlined a number of the NBN pricing plans that have been released by RSPs and stated:

Since the commercial launch of NBN Co's first product, a range of retail products and pricing options have been released by retail service providers (RSPs) for example including from \$29.95 per month (with Skymesh) for an entry level service of 12/1 Mbps and \$45.00 per month (with Exetel) for a 100/40 Mbps service. RSPs are also delivering quality telephony over the network across both the data and voice ports. As at 31 December 2011, 125 customers are using existing handsets to make calls over the NBN Co voice ports.<sup>41</sup>

- 3.59 Vodafone stated that the current pricing of service bundles was comparable to the pricing for digital subscriber line (DSL) and that there was innovation in the types of services being offered. Vodafone stated:

...you are seeing comparable pricing to their DSL type pricing. You are also seeing innovation in the types of services they are offering. They are offering different types of bundles of services – voice, data, pay TV – and I think it is the bundling that is the innovation that NBN brings. At the moment, they are focusing on the 12-megabit service and 25-megabit services – those are the services that consumers are buying. I think that, on the whole, the pricing there is appropriate. The bundling is where you are seeing price innovation and you are not seeing increases in pricing for the standard services.<sup>42</sup>

- 3.60 The ACCC commented that bundling of services by RSPs benefitted the customer and was the current industry trend. The ACCC stated:

We think the industry is probably heading towards retailers offering a sort of 'everything you need in communications' bundle. And that bundle might include not only fixed line voice services and broadband; it might also include pay television services, IPTV services and perhaps mobile services as well. The industry is already heading in that direction. From a consumer point of view, you can see some advantages in just dealing with one retailer for all those services. The NBN is likely, in our view, to boost that sort

---

41 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 8.

42 Mr Matthew Lobb, Vodafone, Transcript of Evidence, 16 April 2012, p. 11.

of trend. I think we are likely to see expanding bundles of services being offered by retailers.<sup>43</sup>

- 3.61 In regard to regulatory issues associated with bundling of services by RSPs the ACCC stated:

... the commission is well and truly on record expressing some concerns about the availability of key content that might form an essential element of those bundles and what the implications of that is for competition in those services. ...If you are going to have competition between retailers providing bundles, you want to make sure that all aspects of the bundles are at least competitively available and, if there are opportunities for some service providers to lock up key content, like sporting content, then that might limit competition. We have expressed some concerns about that. We are certainly monitoring that issue very closely. Otherwise, we think retail services are likely to be competitive and regulatory issues are likely to be fairly limited at the retail level.<sup>44</sup>

## Consumer Protection

- 3.62 The ACCAN advocated for the inclusion of items under the Customer Service Guarantee (CSG) to continue in the NBN environment. This would required the legislated consumer protection arrangements such as the maximum timeframes for new [telephone] connections and fault reports which are currently included under the CSG to be included in the WBA.<sup>45</sup>

- 3.63 The ACCAN stated that inclusion of the CSG was important as it provided that 'consumers can receive compensation if there is a failure to meet CSG timeframes.<sup>46</sup> The ACCAN stated:

The CSG obligations on telco retailers may therefore need to be an element in, for example, NBN Co's wholesale broadband agreements with telcos. ACCAN believes that some form of appropriate service guarantee from NBN Co as wholesaler is needed to allow the CSG to remain a viable consumer protection measure. If such guarantees are not available to retailers, there exists a risk that retail service providers will have no choice but to seek exemptions from the CSG regulatory obligations.<sup>47</sup>

---

43 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 69.

44 Mr Willett, ACCC, Transcript of Evidence, Sydney, 16 April 2012, p. 70.

45 ACCAN, *Submission 11*, p. 3.

46 ACCAN, *Submission 11*, p. 3.

47 ACCAN, *Submission 11*, p. 3.

## Additional Matters

### Small Business e-Readiness

3.64 In the recent Australian Industry Group (AIG) National CEO Survey: Business Investment in New Technologies<sup>48</sup>, it was concluded:

- 'Ubiquitous broadband promises important opportunities for Australian businesses to build competitive advantages.
- Australian businesses recognise the benefits of online technologies, with a near unanimous view amongst businesses surveyed that the internet has had a positive impact on productivity level<sup>49</sup> (especially for financial activities, data exchange and placing and receiving orders).<sup>50</sup>
- However, individual business awareness of, and preparedness for, faster broadband varies considerably.
- In particular, [small and medium enterprises (SMEs)] report lower levels of information about the benefits of faster broadband compared with larger businesses. SMEs also tend to have less confidence that they have the skills /capabilities to take advantage of a new broadband network.'<sup>51</sup>

3.65 The AIG stated that as a consequence of these findings, to enable communities to take advantage of the opportunities offered by faster broadband 'initiatives to improve the e-readiness of business must accompany the rollout of infrastructure.'<sup>52</sup>

3.66 In a similar vein, the Australian Retailers Association (ARA) stated that as most online growth can be attributed to SMEs, increasingly SMEs are looking to the Government for information on ways to take advantage of what the NBN may offer. The ARA stated:

As we have seen, with a lot of the information technology changes coming in at an even greater pace in recent years, it has become very clear that the retail sector, and retail where it touches on tourism and hospitality, has been significantly impacted by those changes. We can see that in many of the trade figures – within the

---

48 The Australian Industry Group (AIG) National CEO Survey 'examined the level and nature of business investment in new technologies over the last three years. It also looked at how businesses are placed to take advantage of a national broadband network and online technologies.' AIG, *Submission 9*, p. 2.

49 AIG, *Submission 9*, p. 2.

50 AIG, *Submission 9*, p. 2.

51 AIG, *Submission 9*, p. 1.

52 AIG, *Submission 9*, p. 1.

ABS figures, as accurate as they are – with the massive growth in the unidentified sector of retail, which holds a number of elements including gaming and the like, but most of that growth, anecdotally and from what evidence we have been able to pool, has been coming through the online sector. Having said that, retailers and our association do not believe that online competition is a threat. It is something that should be embraced and we look forward to working closely with government at state, local and national levels to embrace new technologies and better education to inform our retail members and non-retail members on how to utilise things like the National Broadband Network as they reach out across the country.<sup>53</sup>

- 3.67 The ARA commented that the NBN would be especially useful for SMEs located in regional and remote areas, but that many small business operators lack the knowledge to establish an online presence. The ARA further stated that to remedy this situation, it had been in discussion with major information technology (IT) companies and state governments about putting place programs to educate and assist rural and remote SMEs. The ARA explained:

We are working with some of the major IT companies in programs such as Driving Business Online – eBay is a member of ours and is working quite closely with us on trying to encourage retailers to use its e-commerce platform. We have also been talking to Australia Post, I have had a brief conversation with Google and with some of the other major technology companies as well as with major state governments. In fact, we have a pilot program being rolled out in regional Victoria under Victoria's Regional Growth Fund to help educate SMEs to get online. I think that program will get underway in Ballarat. In New South Wales the government has approached us to assist in education, starting out in regional New South Wales. I have spoken to a large proportion of the current government's ministry on how the government can assist as part of the NBN rollout. We have put in a couple of submissions on plans on how to do that.<sup>54</sup>

- 3.68 The ARA stated that as there had been rapid growth of businesses with an online presence, there were no accurate statistics on identifying the amount of retail sales generated. The ARA explained:

---

53 Mr Heath Michael, Director, Policy, Australian Retailers Association (ARA), Transcript of Evidence, Sydney, 16 April 2012, p. 27.

54 Mr Michael, ARA, Transcript of Evidence, Sydney, 16 April 2012, pp 27-28.

There are no accurate statistics. I think the best stats you will find were in the Productivity Commission report late last year. The problem is that each report you read has a different figure. It can be anything from five to 20 per cent. It depends what is counted. Is it your Qantas ticket sales; is it your hotel sales? All of that can be counted in some of the evidence. The ABS, after the recent PC report, has been told to look at better reporting systems for collection. ... We are missing accurate statistics in this area [and] ...it is the rapid growth that has caused it.<sup>55</sup>

3.69 The ARA further commented that there three main inhibitors for SMEs embracing an online platform. These were identified as the:

- high cost in setting up a business to have an online presence
- limited internal knowledge in how to set up and maintain an online presence
- time investment involved in arranging or creating an online presence.<sup>56</sup>

3.70 The AIG also highlighted that 50 per cent of SMEs it had surveyed had a low perception of their ability to take advantage of the NBN. The AIG found:

Small businesses had the least confidence in their ability to take advantage of a new broadband network. Just under 50% of small businesses surveyed rated their business readiness for a new broadband network as low – none, while the figure was closer to 40% for both medium and large businesses. The most common strategies that businesses are considering to prepare for a national broadband network are training existing staff (80%) and employing new staff (25%).<sup>57</sup>

3.71 To improve SMEs preparedness for and ability to take advantage of the NBN, the AIG identified the following policy options:

- 'Improving the dissemination of information about new technologies;
- Government programs to boost understanding of SMEs of the opportunities provided by a national broadband network;
- Developing better industry-driven mechanisms for collaboration between publicly funded research organisations and businesses; and

---

55 Mr Michael, ARA, Transcript of Evidence, Sydney, 16 April 2012, p. 29.

56 Mr Michael, ARA, Transcript of Evidence, Sydney, 16 April 2012, p. 29.

57 AIG, *Submission 9*, p. 3.

- Improving the competitiveness of tax arrangements by lowering the company tax rate or through more targeted measures.<sup>58</sup>
- 3.72 In its response to the First Report<sup>59</sup>, the Government stated that SMEs would greatly benefit from the NBN by enabling them to better compete where previously geographically impractical. Further, increased on line business competition would likely 'deliver lower prices and other benefits to consumers' while improving operational efficiency for SMEs with an online presence.<sup>60</sup>
- 3.73 The Government also commented that the NBN will enable SMEs to expand into new export markets and 'promote greater remote collaboration between businesses.'<sup>61</sup>
- 3.74 In support of Australian Businesses, the Government announced the Digital Enterprise Program (DEP). The DEP is intended to:
- ... enable more Australian businesses and not-for-profit organisations in communities which will first benefit from the NBN, particularly those located in non-metropolitan areas, to leverage the benefits of broadband-empowered online engagement. This initiative will assist these organisations to achieve cost savings, productivity enhancements and improved marketing through greater online engagement.<sup>62</sup>

## Concluding Comments

### Telstra Agreement

- 3.75 The committee understands that the Telstra Agreement was finalised and came into force on 7 March 2012. This represents a period of just over eight months longer to finalise the Telstra Agreement than envisaged in the NBN Co 2011-2013 Corporate Plan.

---

58 AIG, *Submission 9*, pp 3-4.

59 The Government's response to the JCNBN First Report included information on SMEs as part of its response to the committee's recommendation 4.

60 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 13.

61 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 13.

62 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, pp 13-14.

- 3.76 The committee also notes the NBN Co's comment that the NBN rollout was dependent on a number of key assumptions, one of which was the finalisation of the Telstra Agreement by 30 June 2011.
- 3.77 Taking into consideration the expected timeframe for finalising the Telstra Agreement, this would mean that the NBN rollout has been delayed at least eight months.

#### Telstra's Remaining Copper Network

- 3.78 The committee notes Telstra's comments that it is prepared to negotiate, if the situation arises, for the sale of its remaining copper network. Given that the Government will pay \$11 billion to Telstra for the decommissioning of the copper network and migration of customers, Telstra may receive an additional payment for any future sale of its copper network.

#### Optus Agreement

- 3.79 The committee understands the \$800 million Optus Agreement was not originally planned for under the NBN Co 2011-2013 Corporate Plan. The Optus Agreement allows for the existing Optus HFC network to be subsumed with its customers required to be migrated to the NBN.
- 3.80 The committee acknowledges the factors affecting the ACCC's draft determination and notes the possible resulting negative impact on competition. The committee also notes the ACCC comment in relation to the regulatory framework underpinning the NBN which should 'provide strong incentives for NBN Co to promote utilisation of the NBN and to be responsive to customer needs'.<sup>63</sup>

#### NBN Co's Special Access Undertaking

- 3.81 The committee has received evidence that the 30-year term of the SAU will not inhibit recourse to the ACCC for the monitoring and adjustment of prices over that period.
- 3.82 The committee understands and accepts the comments made by the ACCC that the 30 year term of the SAU is made in the interest of the NBN Co. Further, the 30-year SAU sets in place broad sweeping terms of

---

63 Under the *Competition and Consumer Act 2010* (Cth), the ACCC must 'prepare a draft determination in relation to an application for authorisation before it makes a final determination. The purpose of this draft determination is to test the ACCC's views with the applicant and interested parties.' ACCC, 2012, *ACCC Proposes to Authorise NBN Co/Optus HFC Subscriber Agreement*, media release, 28 May.



principles rather than actual specific terms, and within that framework terms and conditions can be set or revisited on a more regular basis.

#### Wholesale Broadband Agreement

- 3.83 In its Second Report, following industry comment, the committee was concerned about the duration of the WBA. The initial five year term of the WBA, on the ACCC's advice, was later changed by the NBN Co to 12 months.
- 3.84 The committee agrees with the interim term of 12 months for the WBA and notes that 40 RSPs have signed up to offer internet services over the NBN.
- 3.85 The committee also acknowledges and understands the importance and appropriateness of preserving the Customer Service Guarantee as described by ACCAN and recommends the NBN Co take into consideration the inclusion of the CSG within its WBA.

#### Small Business e-Readiness

- 3.86 The committee acknowledges the evidence given by the AIG and the ARA that SMEs are not in a position to take full advantage of the opportunities the NBN may offer.
- 3.87 The committee acknowledges the improved competition and efficiency outcomes for the local and national economies, which can be achieved by greater SME IT knowledge and use of faster broadband offered through the NBN.
- 3.88 The committee understands the Government has launched its DEP. However, further coordination with the IT industry and assistance from government agencies is needed to provide assistance in education and training to reach those resource and time challenged SMEs who would greatly benefit from an online presence.

#### Other

- 3.89 The committee acknowledges the issues presented by ACCAN that the initial consumer telephone and broadband package offered by Telstra may present a higher cost through rental fees and may inconvenience customers who will be later connected to fibre for telephony services.
- 3.90 The committee believes this issue requires further investigation and will examine NBN pricing in its fourth review.

**Recommendation 5**

- 3.91 **The committee recommends that NBN Co include the consumer protection components of the Customer Service Guarantee in its Wholesale Broadband Agreement.**

**Recommendation 6**

- 3.92 **The committee recommends the Government more effectively deliver its Digital Enterprise Program to small and medium sized enterprises (SMEs) with the aim of improving SME access to online resources and enabling interested SMEs to achieve an online presence.**

## Contracting

### Introduction

- 4.1 The committee's Second Report foreshadowed an examination of the NBN Co's procurement policy and tendering processes.<sup>1</sup> This chapter will address both issues in conjunction with the wider contracting practices of the NBN Co.
- 4.2 The design, construction and maintenance works of these contracting partners must also ensure that a safe and secure network is built. At times, both these issues have been controversial and raised concerns among the public and business sector alike.

### Procurement, Tenders and Contracts

#### Procurement Policies

- 4.3 The National Broadband Network (NBN) is Australia's largest publicly-owned infrastructure project since 1950s. Given the size and volume of the rollout, it is critical that policies be established to ensure quality, effective and economical procurement.
- 4.4 The NBN Co Corporate Plan 2011-2013 states:

---

<sup>1</sup> Joint Committee on the National Broadband Network (JCNBN), December 2012, *Review of the Rollout of the National Broadband Network: Second Report*, Parliament of the Commonwealth of Australia, p. 4.

Procurement carries the responsibility for providing the best commercial outcomes from expenditure... Best commercial outcomes are evaluated considering all relevant costs, benefits and risks on a whole of life basis (best value for money, using total cost of ownership).<sup>2</sup>

4.5 According to the Department of Finance and Deregulation, procurement

... begins when an agency has identified a need and decided on its procurement requirement [and] continues through the processes of risk assessment, seeking and evaluating alternative solutions, contract award, delivery of and payment for the property or services.<sup>3</sup>

4.6 To guide its procurements, the NBN Co developed a Buying Guide and a detailed Procurement Manual which defines the 'practices, procedures and decision-making rules appropriate to its circumstances and commercial imperatives'.<sup>4</sup>

4.7 The NBN Co's Corporate Plan advises that the Manual establishes a formal ten-step sourcing process for 'all major spend requirements [and] provides a detailed audit trail of each procurement initiative'.<sup>5</sup> Neither the Manual nor Buying Guide is publicly available.

4.8 The Corporate Plan 2011-2013 also states:

These commercially-oriented practices differ in some ways from those prescribed for government departments but are consistent with government guidelines.<sup>6</sup>

4.9 Although it is a recipient of public monies, the NBN Co, as a government business enterprise, is not subject to the Commonwealth's Procurement Guidelines.<sup>7</sup> The NBN Co explained:

As a government business enterprise we are not subject to those Commonwealth procurement requirements. That does not mean that we do not voluntarily use them as guidelines, and wherever possible we do use them. Our overriding interest and objective is

---

2 NBN Co Limited (NBN Co), *Corporate Plan 2011-2013*, p. 57.

3 Department of Finance and Deregulation, *Commonwealth Procurement Guidelines*, 1 December 2008, para. 2.2.

4 NBN Co, *Corporate Plan 2011-2013*, p. 57.

5 NBN Co, *Corporate Plan 2011-2013*, p. 58.

6 NBN Co, *Corporate Plan 2011-2013*, p. 57.

7 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

to get value for money for the Australian government and hence the Australian taxpayer.<sup>8</sup>

- 4.10 The NBN Co stated its Procurement Manual is based on the Commonwealth Procurement Guidelines,<sup>9</sup> and stressed that ‘value for money is ensured through competitive processes [and] transparent and proven procurement methodologies’ as provided in the Procurement Manual.<sup>10</sup> The NBN Co stated:

the company has committed to adhere to the principles of fairness, transparency, competition and value, which are reflected in those guidelines.<sup>11</sup>

- 4.11 Further, as a ‘prescribed authority’, the NBN Co is largely exempt from the *Freedom of Information Act 1982* (Cth), with its exemption covering all documents relating to its commercial activities. In April, the Attorney-General announced the legislated review of the NBN Co’s compliance with its remaining freedom of information obligations.<sup>12</sup> The review will be tabled in Parliament after its anticipated completion date of 30 June 2012.

## Tender Processes

- 4.12 Released in October 2011, the Commonwealth Government Business Enterprise Governance and Oversight Guidelines apply to government business enterprise (GBE) companies such as the NBN Co.<sup>13</sup> However, the NBN Co stated:

There are no formal requirements in the Commonwealth Government Business Enterprise Governance and Oversight Guidelines that require tender outcomes to be published by GBEs.<sup>14</sup>

- 4.13 The Guidelines provide that ‘principal objectives’ for GBE companies include:

---

8 Mr Mike Quigley, Chief Executive Officer, NBN Co, Transcript of Evidence, Canberra, 5 July 2011, p. 19.

9 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

10 NBN Co, *Submission 2.5*, Answer to Question on Notice No. 9, Second Review of the Joint Committee on the National Broadband Network, p. 15.

11 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

12 Roxon N (Attorney-General and Minister for Emergency Management), 2012, *Review of NBN compliance with FOI*, Parliament House, Canberra, media release, 16 April.

13 Commonwealth Authorities and Companies Regulations 1997, reg. 4.

14 NBN Co, *Submission 15.1* Answer to Question on Notice No. 13, p. 2.

- Operate efficiently at minimum costs for a given scale and quality of output; and
  - Price efficiently noting economic forces (level of demand, supply costs and, individual goods and services).<sup>15</sup>
- 4.14 Achieving these objectives requires a level of competition for NBN Co contracts; most frequently in procurements using public monies, this requires an open and competitive tender process.
- 4.15 The NBN Co's 'standard' process of tender evaluation includes ranking responses from respondents on key indicators including:
- quality of project management plans
  - occupational health and safety plans
  - quality processes
  - contractor's experience
  - pricing and
  - contract compliance rates.<sup>16</sup>
- 4.16 Although the NBN Co provides reassurances that the contracts it enters into are value for money and emerge from a competitive environment,<sup>17</sup> it has entered into contracts with companies that were negotiated outside tender processes.
- 4.17 For example, the NBN Co entered into a contract with Silcar after a tender round was reportedly not achieving results. The NBN Co stated:
- It is not uncommon for large telcos to enter into negotiations such as we did. ... We did go out, as I said before, to a broad-ranging open tender process, but it was clear after some months of effort that that was not going to get us where we needed to be in terms of the best value for this project. So we changed approach.<sup>18</sup>
- 4.18 Following direct one-on-one negotiation for a period of eight weeks, a construction contract was concluded between the NBN Co and Silcar for the construction of the fibre network in Queensland, New South Wales

---

15 Department of Finance and Deregulation, *Commonwealth Government Business Enterprise Governance and Oversight Guidelines*, October 2011, para 1.8.

16 NBN Co, *Submission 2.5*, Answer to Question on Notice No. 9, JCNBN, Second Review, p. 15.

17 NBN Co, *Submission 2.5*, Answer to Question on Notice No. 9, JCNBN, Second Review, p. 15.

18 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 5 July 2011, p. 19.

and the Australian Capital Territory.<sup>19</sup> The initial contract is valued at \$380 million, with a possible extension of two years and an additional value of \$740 million.

## Contracts Awarded

4.19 As of May 2012, the total value of awarded contracts is \$9 billion.<sup>20</sup> Table 4.1 shows the key contracts awarded and their value.

## Construction Tenders

4.20 As evidenced in Table 4.1,<sup>21</sup> a major component of the NBN Co's contracting is for construction works. Construction tenders are evaluated by the Construction Steering Committee consisting of: the Chief Executive Officer, Chief Finance Officer, and the Heads of Construction, Operations, Network Technology and Corporate Services together with the Chief Legal Counsel and Chief Procurement Officer.<sup>22</sup>

4.21 The contracts have attracted public debate on the preliminary processes and ongoing progress of the NBN rollout. This section details the initial suspension of the tender process in April 2011 and then, in turn, provides details on the contracts awarded for the fibre, wireless and satellite networks.

## Suspension of Construction Tender Process

4.22 In April 2011, after an 18-month tender process, the NBN Co announced that it was suspending its tender process. The decision to suspend the process was made by the Construction Steering Committee and came after the fourth round.<sup>23</sup>

4.23 In May 2011, Mr Mike Quigley, Chief Executive Officer of the NBN Co stated

I have stated that we will not 'build at any cost'. We understand our obligations to taxpayers to deliver value for money for their tax dollars, so we announced on 1 April that we had suspended

---

19 NBN Co, 2011, *NBN Co & Silcar reach agreement to deliver value-for-money fibre rollout*, media release, 1 June.

20 NBN Co, Answer to Question on Notice: Question No 346, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings, February 2012.

21 Values of the awarded contracts were collected from a variety of media releases, reports to parliamentary committees and other public statements.

22 NBN Co, *Submission 2.5*, Answer to Question on Notice No. 17, JCNBN, Second Review, p. 21.

23 NBN Co, *Submission 2.5*, Answer to Question on Notice No. 17, JCNBN, Second Review, p. 21.

the existing construction process and entered into a new process, which is ongoing.<sup>24</sup>

- 4.24 The NBN Co explained that value for money was the main consideration in deciding tenders and stated:

In all these large tenders, you have to make a judgement in the end about whether or not you believe you are achieving value for money. ... We were not satisfied, with the construct we had put in place and the responses that we had, that we were going to get the best outcome, so we changed that process. We suspended that process and moved into another process.<sup>25</sup>

- 4.25 Though the NBN Co's procurement policies are not publicly available nor have been made available to the committee, the NBN Co has stated that its procurement policy did not change after the suspension of the tender process.<sup>26</sup>

- 4.26 After the tender process suspension, the NBN Co altered the request for tender to introduce joint-venture contracting. The round was then reinstated and completed. In October 2011, NBN Co announced that the suspension in construction tenders has caused a delay of 'some months'.<sup>27</sup>

---

24 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 May 2011, p. 4.

25 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 May 2011, p. 11.

26 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, p. 5.

27 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, p. 5.



Table 4.1 Key Contracts Awarded by the NBN Co as at 22 May 2012

Component	Supplier/s	Value
FTTP Solution Providers for Greenfield Areas	Fujitsu Australia	Estimated at over \$100M for the first 12 months
Fibre network construction	Syntheo (SA and NT)	<\$341M for 4 years
	Syntheo (WA)	<\$484M over 4 years
	Transfield (Vic)	<\$395M over 4 years
	Silcar (Qld, NSW, ACT)	<\$1.12B over 4 years
	Visionstream Australia (Tas)	\$300M for 4 years (option to extend)
Wireless Network	Ericsson	<\$1.1B for 10 years
Spectrum licences	AUSTAR	\$120M
Satellites	Space Systems/Loral	\$620M
Interim Satellite Solution	Optus Network Pty Ltd	\$200M (Optus)
End User Technology Services	Fujitsu Australia	<i>Unknown</i> <sup>28</sup>
IT Data Platforms and Infrastructure Stacks	Cisco	\$9.5M over 3 years
Business and Operational Support Systems and Services	IBM Australia	\$200M+ over 3 years
First Release Site Construction	Transfield Services (Minnamurra, NSW)	<i>Unknown</i> *
	Telstra (Brunswick VIC)	<i>Unknown</i> *
	ETSA Utilities (Willunga, SA)	<i>Unknown</i> *
	Silcar Pty Ltd (Armidale, NSW)	<i>Unknown</i> *
Passive Network Hardware	Prysmian	\$300M over 5 years
	Corning	<\$1.2B over 5 years
	Warren & Brown Technologies	<\$100M over 5 years
	TE Connectivity (formerly Tyco Electrics Pty Ltd)	\$400M over 5 years
Design Services for First Release Sites	Bilfinger Berger Services	<i>Unknown</i> *
	Downer EDI Engineering	<i>Unknown</i> *
	Service Stream Communications	<i>Unknown</i> *
	Transfield Services	<i>Unknown</i> *
	Visionstream Australia	<i>Unknown</i> *
	GHD Pty Ltd	<i>Unknown</i> *
	Silcar Pty Ltd	<i>Unknown</i> *
Active Network Equipment	Alcatel-Lucent (GPON and Ethernet Aggregation Equipment)	>\$70 million
	JEP Services A (Optical Transmission Equipment)	<i>Unknown</i> *
Hosting and ERP Platform and Service Integrator	IBM Oracle Australia Accenture	Collectively, contracts valued at \$23M over three years

Source NBN Co, 'Tenders Awarded', [www.nbnco.com.au](http://www.nbnco.com.au), viewed 22 May 2012.

28 Where 'unknown' is indicated, searches on the public record were conducted for this information. This information was not found.

## Fibre

4.27 The Shareholder Ministers' second NBN rollout Performance Report (the Performance Report) states that approximately 88 per cent of the total of NBN construction activity over the next two years has been awarded to contractors.<sup>29</sup> The construction contracts have been awarded as follows:

- Syntheo (Lend Lease Group/Service Stream); for the construction in South Australia (SA), Western Australia (WA) and the Northern Territory (NT):
  - ⇒ covers the design and construction of the fibre optic network in NT and SA over a period of two years, with an option to extend a further two years;
  - ⇒ value of the initial agreement for delivery in SA and NT is approximately \$141 million, with a potential value of up to \$341 million if extended for a further two years;<sup>30</sup> and
  - ⇒ for construction in WA, the initial contract worth \$174 million, with a potential value of up to \$484 million if extended for a further two years.<sup>31</sup>
- Transfield Services for the construction in Victoria:
  - ⇒ an initial 2 year contract with the option to extend for a further two years; and
  - ⇒ initial agreement worth \$133 million, with a potential value of up to \$395 million if extended by a further two years.<sup>32</sup>
- Silcar for the construction in Queensland, New South Wales and the Australian Capital Territory:
  - ⇒ 'represents almost 40 per cent of national construction activity planned over the next two years';<sup>33</sup> and
  - ⇒ initial agreement worth \$380 million over the next two years, with the option of a further two years at an additional value of \$740 million.<sup>34</sup>

29 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 10.

30 NBN Co, 2011, *NBN South Australia and Northern Territory construction contracts signed*, media release, 14 November.

31 NBN Co, 2011, *NBN fibre rollout to begin in WA, Vic as construction contracts signed*, media release, 6 September.

32 NBN Co, 2011, *NBN fibre rollout to begin in WA, Vic as construction contracts signed*, media release, 6 September.

33 NBN Co, 2011, *NBN Co & Silcar reach agreement to deliver value-for-money fibre rollout*, media release, 1 June.

- Visionstream Australia Pty Ltd for the construction of the remainder of the fibre network in Tasmania:
  - ⇒ works will construct the network for the remaining 190,000 premises by 2015;
  - ⇒ contract valued at approximately \$220 million over an initial four year period; and
  - ⇒ the contract also includes provisions for ongoing maintenance of the network in Tasmania.<sup>35</sup>

### Fixed Wireless Contracts

- 4.28 On 1 June 2011, the NBN Co announced a ten-year contract with Ericsson for the design, build and operation of the NBN's wireless service. The turnkey contract is worth up to \$1.1 billion and the NBN Co 'intends to assume greater responsibility for construction and operation' of the network.<sup>36</sup>
- 4.29 Both the wireless and satellite services also require the NBN Co to acquire the spectrum licences regulated by the Australian Communications and Media Authority. In February 2011, the NBN Co announced that it had acquired wireless spectrum from AUSTAR that is 'sufficient to meet most of its needs for the fixed-wireless services'. However, the spectrum acquired from AUSTAR, valued at \$120 million<sup>37</sup> does not include the necessary spectrum for Western Australia and the Northern Territory.<sup>38</sup>
- 4.30 The contract with AUSTAR allows NBN Co to acquire the 2.3 GHz (gigahertz) and 3.4 GHz spectrum holdings and includes payments of \$58 million for the subsidiary that holds the spectrum licences, and a further \$62 million for the assignment of this subsidiary's debt.<sup>39</sup>

### Satellite Contracts

- 4.31 In February 2012 the NBN Co announced that contracts for the construction of the space segment of the satellite service had been awarded to Space Systems/Loral. The contract is worth approximately

---

34 NBN Co, 2011, *NBN Co & Silcar reach agreement to deliver value-for-money fibre rollout*, media release, 1 June.

35 Shareholder Ministers 'Performance Report to 31 December 2011' *Submission 12*, p. 10.

36 NBN Co, 2011, *NBN Co selects fixed wireless network partner for med-2012 service start*, media release, 1 June.

37 NBN Co, 2011, *NBN Co acquires AUSTAR spectrum for rural and regional network*, media release, 17 February.

38 NBN Co, 2011, *NBN Co selects fixed wireless network partner for med-2012 service start*, media release, 1 June.

39 NBN Co, 2011, *NBN Co acquires AUSTAR spectrum for rural and regional network*, media release, 17 February.

\$620 million and follows a two year procurement process. The contract is part of a total cost of \$2 billion for the NBN Co's satellite service.<sup>40</sup>

- 4.32 Under the contract, 40 personnel will receive training to conduct maintenance on the space segment.<sup>41</sup> It is unclear whether this training will be for NBN personnel or its contractors.
- 4.33 Contracts for the supporting gateway segment (a series of ground stations located around Australia) are yet to be announced. Similarly, the satellite infrastructure installed on individual premises and their future maintenance is currently the subject of an ongoing procurement process.<sup>42</sup>
- 4.34 Further discussion of the satellite service's components and service is included in Chapter 5.

## Other Issues

- 4.35 Throughout its inquiries, other issues regarding the contracting and procurement practices of the NBN Co have been raised. This includes the impact of delays in procurement on the rollout, the transparency of the NBN Co's tender registry, and the awarding of contracts to Australian companies.

## Causes and Costs of Delays

- 4.36 The NBN Co has frequently cited the following reasons for delays incurred in the rollout as projected by its Corporate Plan 2011-2013:
- Suspension of the construction tender round in April 2011;
  - The decision to increase the points of interconnect by the Australian Competition and Consumer Commission; and
  - The protracted negotiation and finalisation of the Telstra Agreement.<sup>43</sup>

---

40 NBN Co, 2012, *NBN Co selects Space Systems/Loral for communications satellites*, media release, 8 February.

41 Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, Transcript of Evidence, Senate Environment and Communications Legislation Committee, Canberra, 14 February 2012, p. 196.

42 NBN Co, Answers to Question on Notice: Question No 302, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings, February 2012.

43 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, pp 4-5.

4.37 Importantly, the NBN Co is incurring contractors' late fees as a result of these delays. At a Senate Estimates hearing in February 2012, the NBN Co stated:

Obviously I cannot say no, we are not going to pay, at some point compensation if we have really delayed contractors. [W]e have tried to build a very good relationship with the construction contractors [and] we have not seen at this point in time any big impact of that, because we try to give them a reasonable amount of notice before they are mobilised. Clearly, in this environment, you are not being as efficient as you could be.<sup>44</sup>

### Online Tender Registry

4.38 The NBN Co website operates as a tender portal where current, closed and awarded tenders are announced and submitted.

4.39 However, this website appears to be so infrequently updated that its information is no longer accurate. This is true of both the 'current' tenders and those tenders that have been formally awarded. As at 22 May 2012, the NBN Co website was advertising a 'current' tender that had a closing date of 30 January 2012.<sup>45</sup>

4.40 The 'awarded' register is also incomplete. In May 2011, the NBN Co stated,

Over the past 18 months we have conducted some 90 tenders involving literally hundreds of companies.<sup>46</sup>

4.41 Many new tenders and contracts have been announced since May 2011, yet very few tender rounds are declared on the NBN Co website. A notable absence from the online register is the \$620 million contract for the satellite service space segment awarded in February 2012.<sup>47</sup>

### Australian Companies

4.42 At the end of the current reporting period, 52 per cent of the NBN Co's activities are using local 'Australian content'. The Performance Report states:

---

44 Mr Quigley, NBN Co, Transcript of Evidence, Senate Environment and Communications Legislation Committee, Canberra, 14 February 2012, pp 177-178.

45 NBN Co, 2012, 'RFP: Power Managed Services Partner', <[www.nbnco.com.au](http://www.nbnco.com.au)>, viewed 22 May 2012.

46 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 May 2011, p. 4.

47 NBN Co, 2012, 'Awarded tenders' <[www.nbnco.com.au](http://www.nbnco.com.au)>, viewed 22 May 2012.

Local content is actively promoted as part of NBN Co procurement processes. Certain contracts are inherently local such as construction and network operations. For other contracts, NBN Co has sought to maximise the local content, particularly where local manufacturers are already established. The fibre equipment supply contracts are examples where investment is being made in local production capacity. Local content reached 52 per cent by December 2011. Future Australian construction and operations contracts are expected to increase the value of local content.<sup>48</sup>

4.43 Predominantly, these contracts have been for the premise-infrastructure associated with the NBN rollout such as:

- Internal fibre distribution hubs for apartment blocks and offices;
- Internal cables and patch leads; and
- Wall outlets and devices that will house the connection of the fibre from the street to the outside of premises.<sup>49</sup>

4.44 However, in answers to questions on notice to a Senate Estimates Hearing, the NBN Co updated and clarified this information:

Australian controlled companies have been awarded \$1.6 billion contract value out of \$9 billion total contract value to date, or 18 per cent. It should also be noted that the value of Australian content in all contracts to date is \$4.3 billion.<sup>50</sup>

4.45 On the matter of 'Australian content', the Performance Report stated:

- All services performed in Australia are regarded as 100 [per cent] local content – construction, installation, design, testing and most consulting.
- All equipment substantially manufactured in Australia is counted as 100 [per cent] local content even though a certain small percentage comprises imported components.
- All imported equipment is assigned zero local content even though the contract value may include 10 to 20 [per cent] local services for installation, commissioning and ongoing support.<sup>51</sup>

---

48 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, pp 12 and 30.

49 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 11.

50 NBN Co, Answer to Question on Notice: Question No. 346, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings, February 2012.

51 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 30.

## Contracts Awarded to Australian-Controlled Companies

4.46 In November 2011, the NBN Co released the names of Australian companies who had been awarded contracts for the localised equipment in the fibre rollout such as the fibre distribution hubs, the fibre distribution terminals and premises connection devices. Table 4.2 provides details of these contracts.

Table 4.2 Australian Industry Contracts for Provision and Installation of Local Equipment

Supplier	Component	5 year potential value
Corning	Internal fibre distribution hubs	\$310m
	Fibre distribution terminals	
	Internal service drop cable	
	Internal multi-fibre cable	
	Network termination unit patch leads	
	Premises cable	
Optimal/OFS	Premises cable	\$110 m
TE	Premise connection devices	\$105 m
	Fibre distribution terminals	
	Fibre Collector Distributors	
Warren & Brown	Fibre wall outlets	\$60 m
Madison	Premise connection devices	\$30 m
3M	Retro-fit cable pathways	\$20 m
<b>Total</b>		<b>\$635 m</b>

Source NBN Co, 'Equipment contracts awarded to companies with strong local presence', Media Release, 15 November 2011.

4.47 The size of the key contracts awarded raises concerns that the NBN Co procurement process might prevent smaller local companies from submitting proposals as the potential contract combines multiple elements that only large multi-national companies can deliver. When asked if competition and cost-efficiency would be enhanced if contracts were divided into smaller, separate contracts, the NBN Co stated:

Not always; it depends on the nature of the procurement of goods and/or services. Factors to be assessed include the market structure, and the risk that the technical and management resources required to integrate the disparate elements may exceed any gains from attempting to optimise every single element of the purchase.<sup>52</sup>

4.48 The NBN Co requires all contracts over \$20 million to develop Australian Industry Participation (AIP) plans identifying local businesses and how

52 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

they will be engaged by the third party. The NBN Co also stated that 'certain contracts include specific requirements for local manufacture of certain equipment such as fibre optic cable after a certain transition period from overseas supply'.<sup>53</sup> The NBN Co did not provide examples of such contracts.

- 4.49 To meet these AIP requirements, the contracting company must engage local supplies or 'demonstrate local production capabilities and activities to the satisfaction of the NBN Co'.<sup>54</sup> For example, Ericsson (the contractor for the construction, operation and maintenance of the wireless network) has engaged local businesses including Netcom and local wireless construction contractors.
- 4.50 AIP plans are not required for construction or installation services which, by their nature, use 100 per cent local content or, contracts for the supply of equipment like satellites which have 'unique global sources'.<sup>55</sup>

## Network Security

- 4.51 The NBN Co is required to consult with law enforcement and security agencies to ensure that national security and resilience considerations are considered in the design and long-term operation of the network.<sup>56</sup> However, the extent to which the security concerns are considered when evaluating tenders is unclear, as is the extent of government involvement.
- 4.52 Government and security agencies do have a role in the evaluation of tendering companies' suitability to provide services under NBN contracts.<sup>57</sup> The NBN Co stated:

NBN Co has been established as a wholly owned Commonwealth company with an independent Board responsible for the day-to-day operations of the company. NBN Co is required to operate on a commercial basis and at arms-length from Government. In accordance with the *Commonwealth Authorities and Companies Act*

---

53 NBN Co, Answer to Questions on Notice No 347, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings of February 2012.

54 NBN Co, Answer to Questions on Notice No 349, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings of February 2012.

55 NBN Co, Answer to Questions on Notice No 348, Senate Standing Committee on Environment and Communications, Additional Estimates Hearings of February 2012.

56 Department of Broadband, Communications and the Digital Economy (DBCDE), *Submission 3.3, Answer to Question on Notice No. 7.1, Second Review of the JCNBN*, p. 5.

57 NBN Co, *Submission 15.2, Answer to Question on Notice No. 10*, p. 5.



1997, NBN Co must notify responsible Ministers of significant events. This includes notifying Shareholder Ministers prior to signing significant contracts.<sup>58</sup>

- 4.53 Despite this, the NBN Co does consult with government agencies where contracted works may involve potential security risks. The NBN Co stated:

In those tenders where there is a potential security risk to the network (either through the provision of equipment, software or services), NBN Co consults closely with Government security agencies. There is also an evaluation of successful suppliers as part of the ongoing contract management processes.<sup>59</sup>

- 4.54 As recent examples demonstrate,<sup>60</sup> there are certain works where vulnerabilities in the network could potentially be created or extended as a result of a particular company providing those works. This leads to a broader issue of the security of the network.

- 4.55 The NBN Co gave evidence to the committee's Second Review on the security aspects of the network and stated:

A lot of [cyber] attacks take place at layers that sit above us. We are at layer 2, the Ethernet. We move bits across the network. So what we have to pay close attention to is the security of the equipment, the physical security of the plant. The fact is that it is certainly not as easy to tap into fibre as it is to tap into either copper or a wireless service. We are looking at the physical security of points of interconnect, we are looking at the physical security of the systems that we lay into the ground and of course we are looking at the physical security of buildings.<sup>61</sup>

- 4.56 The NBN Co adopted the Government's Protective Security Policy Framework (developed by the Attorney-General's Department) and the Information Security Manual (issued by the Defence Signals Directorate) to guide the design, construction and maintenance of the network.<sup>62</sup> The NBN Co stated:

These documents provide physical and technical security guidance for networks that are of national security concern. The NBN Co's Security Framework is designed around these standards,

---

58 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

59 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 10, p. 5.

60 Barker G and Ramli D, 2012, 'China's Huawei banned from NBN' *Australian Financial Review*, 24 March.

61 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 May 2011, p. 11.

62 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 10, p. 5

including annual compliance reporting to [the Attorney-General's Department].<sup>63</sup>

4.57 To guard against potential network vulnerabilities, the NBN Co employed the following preventative strategies: 'certification and accreditation, regular testing, security validation exercises, and a range of technologies'. Although the NBN Co stated that 'any network could potentially be a target for cyber attack', the NBN Co actively engages with relevant government agencies and has

... adopted a strategy that incorporates certification and accreditation, regular testing, security validation exercises and a range of technologies that guard against cyber attack.<sup>64</sup>

## Concluding Comments

### Procurement policies

4.58 It is concerning that the NBN Co's Procurement Manual is not available to the committee. In light of the numerous tender rounds that have been abandoned, it appears that there may be issues of cost-effectiveness and probity with the NBN Co's procurement policies. It is concerning that these policies have not been altered following several abandoned tender rounds.

4.59 It is not known whether the NBN Co has already incurred contractor's late fees nor is it clear if the NBN Co can reasonably negotiate alternatives with its contractors.

4.60 As the NBN Co is not subject to the Commonwealth Procurement Guidelines, the Australian community has no reassurance that the vast procurements associated with the network rollout are cost-effective as would be encouraged in a competitive tendering environment.

4.61 There may be legitimate commercial-in-confidence reasons not to publish the Procurement Manual. Whether directly or indirectly, concerns of commercial-in-confidence material continue to be raised by participants in the information they provide to the committee. Both the First and Second Report noted that limiting the information provided to the committee on

---

63 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 10, p. 5.

64 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 10, p. 5.

commercial-in-confidence grounds severely limited its ability to report on its oversight responsibilities to the Parliament.

- 4.62 During the second review, the Department of Broadband Communications and the Digital Economy committed to examining the public interest test to assess whether material is commercial-in-confidence.<sup>65</sup> This advice was neither provided to the committee in its second review nor during the current review period. The committee again requests that this examination takes place.

### Tender Registry

- 4.63 The committee notes that the NBN Co is not formally required to publish its tender outcomes.<sup>66</sup> However, as the NBN Co is currently publishing details of some tender processes, it is appropriate that this register be a complete and up-to-date list.
- 4.64 The committee appreciates that there may be circumstances where the publication of details of awarded contracts may be inappropriate for reasons of commercial sensitivity. However, the significance of the public expenditure points to a need for greater transparency of the NBN Co's contracting practices.
- 4.65 The list of key contracts provided in Table 4.1 is clearly not an exhaustive list of the contract obligations of the NBN Co. The information contained in the table is basic information, but information that is so dispersed in the public record that it is possible that some details have been overlooked in the table's compilation.
- 4.66 Similarly, other than the contracts listed in Table 4.2 totalling \$635 million, the individual value other contracts awarded to Australian companies is unclear.
- 4.67 However, the NBN Co has publicly released information of its awarded contracts which is not reflected in the online register. At the very least, the NBN Co tender registry should be frequently updated to accurately reflect the status and outcomes of its tender processes.

### Network Security

- 4.68 Although a fibre network is comparatively more secure than the existing copper network, there are still questions surrounding how the NBN design, construction and maintenance projects will not expose end-users to risks as a result of potential vulnerabilities. As the 'digital age'

---

65 Mr Peter Harris, Secretary, DBCDE, Transcript of Evidence, Sydney, 24 October 2011, p. 12.

66 NBN Co, *Submission 15.1*, Answer to Question on Notice No. 13, p. 2.

progresses, these issues will be of critical importance to the security of data and communications.

### **Recommendation 7**

4.69 **The committee recommends the Department of Broadband, Communications and the Digital Economy review its internal processes where the public interest test is used to assess whether material is commercial-in-confidence, and provide details of this review to the committee.**

### **Recommendation 8**

4.70 **The committee recommends that, as a matter of urgency, for all future contracts the NBN Co update, and regularly maintain, its tender registry to include the following basic information:**

- **A list of works included in the original request for tenders;**
- **The dates at which the tender opened, closed and was awarded;**
- **The name of the awarded company or companies;**
- **The length of time the services or goods are expected to be completed;**
- **The value of the contract, or where commercial sensitivities prohibit disclosure, the aggregate value of the contracts;**
- **The details of any extensions and variations to contracts as well as the value of an extended contract;**
- **The value and percentage of local content in the awarded contract;**  
**and**
- **Any other relevant accompanying information.**

## Services in Regional and Remote Australia

- 5.1 In its Second Review, the committee reported on access to broadband services in regional and remote areas in Australia and made recommendations on the impending delivery of the National Broadband Network (NBN). Since tabling its report in November 2011, significant milestones have been reached in the delivery of services to regional and remote Australia and public discussion is increasingly focussed on how these communities can maximise the benefits of new public infrastructure.
- 5.2 All three technologies, fibre, wireless and satellite, will be used to rollout the NBN to regional and remote Australia. In accordance with the Government's Statement of Expectations and the NBN Co Corporate Plan 2011-2013, the 'last 7%'<sup>1</sup> of premises that do not fall within the fibre footprint will be serviced by either a fixed wireless or satellite connection. These technologies are used to reach areas of low population density that make it 'both difficult and expensive to build infrastructure' to these premises.<sup>2</sup> Consequently, the 'last 7%' are towns located in regional and remote Australia.
- 5.3 This chapter discusses all three technologies in turn and canvasses the key opportunities, challenges and concerns that regional and remote Australia will face in receiving high-speed broadband. The chapter notes that some concerns are amplified depending on the technology that will service these communities.

---

1 NBN Co, *Corporate Plan 2011-2013*, p. 69.

2 NBN Co, *Corporate Plan 2011-2013*, p. 69.

## Fibre

- 5.4 Seventy per cent of regional Australia will receive fibre.<sup>3</sup> This section presents evidence received by the committee from regional and remote Australia on how the NBN will affect their local communities.
- 5.5 Following an informative visit to Broken Hill in New South Wales in July 2011, the committee elected to travel to another regional centre for its Third Review. To mirror the increasing public discussion about how and why high-speed broadband will change regional Australia, the committee elected to visit a regional town where the rollout was nearing completion and such debate had concrete, direct relevance.
- 5.6 On 30 April 2012, the committee travelled to Willunga for a site inspection and a public hearing.<sup>4</sup>

### Case Study: Willunga, South Australia

- 5.7 Willunga was announced as one of the five first-release sites, covered 940 premises with 91 per cent of properties consenting to the installation of fibre optic cables to their premises.<sup>5</sup> Commercial services have been available to residents since 30 September 2011.
- 5.8 Willunga was chosen by the NBN Co as a first-release site to demonstrate and test the fibre network's design in a deployment area with dispersed housing. According to the NBN Co, 'Willunga represents some of the diversity of housing types and situations that the NBN Co will encounter across Australia in the volume rollout'.<sup>6</sup> Willunga was also the only first release site where NBN Co installed new pits and pipes rather than use existing ducts.<sup>7</sup>
- 5.9 During its inspection, the committee viewed a fibre distribution hub, a multiport and zone terminal and the main joint. Figure 5.1 shows the street infrastructure that supports the NBN fibre network.

---

3 Senator the Hon Stephen Conroy, Minister for Broadband and Communications and the Digital Economy, 'National Press Club Address', 13 December 2011.

4 The committee held a public hearing with witnesses from Onkaparinga City Council, Willunga Business and Tourism Association, Tatachilla Lutheran College, and a local small business, Office & Image.

5 NBN Co, 2011, *National Broadband Network goes live in Willunga*, media release, 16 September.

6 NBN Co, 2011, *National Broadband Network goes live in Willunga*, media release, 16 September.

7 NBN Co, 2011, *National Broadband Network goes live in Willunga*, media release, 16 September.

Figure 5.1 Inspection of Willunga, South Australia



Source *Committee Inspection, 30 April 2012, Willunga, South Australia*

5.10 As Willunga is one of only five sites on mainland Australia with a fibre connection, the local community was eager to discuss the burgeoning opportunities that the new infrastructure will bring for regional Australia. Notably, the Willunga Business and Tourism Association stated:

... we are still in a pilot situation. We are still learning what this National Broadband Network, the technology, the infrastructure is, as well as the errors that can occur.<sup>8</sup>

5.11 Similarly, Office & Image, a local business with a live NBN connection, commented:

It is still very early days in setting up the foundation of the NBN, which bring lots of excitement and possibilities for the businesses and community in Willunga.<sup>9</sup>

## Strategies of Local Government

5.12 The City of Onkaparinga Council (the Council) is South Australia's largest council and services both urban and regional communities in the region.

8 Mr Thomas Herbert Laing, Secretary, Willunga Business and Tourism Association, Transcript of Evidence, Willunga, 30 April 2012, p. 7.

9 Mrs Lesley Bakker, Proprietor, Office & Image, Transcript of Evidence, Willunga, 30 April 2012, p. 12.

The Council covers 68,000 premises, with 168,000 residents, and is developing an array of programs and services to capitalise on new opportunities.<sup>10</sup> This includes preparing a new long-term digital economy strategy. Its Chief Executive Officer stated:

The first step [of preparing the new strategy] will be a visioning workshop, which will be held in June [2012]. It will start with a visioning of what a fully enabled NBN region, could, should and would look like and perform in 15 years time. Then we will be preparing a five-year implementation plan and rollout one-year plans from there.<sup>11</sup>

5.13 The Council is also developing programs that will bring immediate outcomes. The Council stated:

... we continue to work with the implementation of the Digital Enterprise program, which is funded by the federal Department of Broadband, Communications and the Digital Economy; the implementation of the Digital Hubs program; and the implementation of the Digital Local Government program, which will focus on one aspect of our business – delivering development application services online, which is a big move for council, with a focus on videoconferencing, also at the Willunga hub.<sup>12</sup>

5.14 In May 2011, Senator Stephen Conroy, Minister for Broadband, Communications and the Digital Economy launched the National Digital Economy Strategy. One of its eight goals is to improve online government service delivery and engagement so that, by 2020, four out of five Australians will choose to engage with government through online services.<sup>13</sup> Working towards this goal, the Government announced the \$17.1 million Digital Local Government program (the DLG program) providing funding to local governments in first release sites. Following an initial round, an expanded second round was open to 20 local government councils and closed on 31 March 2012.

5.15 The aim of the DLG program is to encourage the development of online services that are replicable and scalable, and that other local governments across Australia can adapt for their purposes. According to the Department of Broadband, Communications and the Digital Economy

---

10 Mr Mark Dowd, Chief Executive Officer, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 2.

11 Mr Dowd, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 2.

12 Mr Dowd, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 2.

13 Department of Broadband, Communications and the Digital Economy, (DBCDE), 2011, 'National Digital Economy Strategy: Government Services' <[www.nbn.gov.au](http://www.nbn.gov.au)>, viewed 7 May 2012.



(DBCDE), the program 'has the potential to encourage a step change in the quality, availability and speed of local government services'.<sup>14</sup>

5.16 Under a DLG grant, the Onkaparinga Council is:

... developing an online process for preliminary advice, lodgement, assessment and enforcement of development applications, including high-definition videoconferencing sessions with council's development services staff and applicants.<sup>15</sup>

5.17 Other regional councils who received grants under the DLG program are working to develop online services including a video-based online emergency management system, and video-conferencing systems for web-based interactive engagement between councillors and the public.<sup>16</sup> However, most grants allocated were to assist local governments to design online services for development applications similar to that of the Onkaparinga Council.

5.18 Another focus of the Council is the development public access points (libraries and communities centres) and e-literacy within their wards:

Libraries are probably the greatest source of council goodwill to the community. What the NBN provided has just added onto that goodwill already. The Forward IT program that we did in conjunction with the Department of Further Education, Employment, Science and Technology... indicated that people really prefer to work through an area they trust, such as a library, and will continue to do so. It has provided the library service with an additional way of dealing with the community or providing a service to the community.<sup>17</sup>

## Business Opportunities

5.19 The capacity of high-speed broadband to bring new business opportunities, open new markets and increase commercial efficiency is substantial. Economic modelling shows that regional Australia stands to benefit more than metropolitan areas from increased internet connectivity. On average, a 10 per cent increase in connectivity would raise regional

---

14 DBCDE, 'Digital Local Government program', <[www.dbcde.gov.au](http://www.dbcde.gov.au)>, viewed 7 May 2012.

15 DBCDE, 'Digital Local Government program – synopsis of round one projects', <[www.dbcde.gov.au](http://www.dbcde.gov.au)>, viewed 7 May 2012.

16 DBCDE 'Digital Local Government program – synopsis of round one projects', <[www.dbcde.gov.au](http://www.dbcde.gov.au)>, viewed 7 May 2012.

17 Mr Brian Hales, Economic Development Advisor, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 4.

output by 0.53 per cent compared with a 0.38 per cent increase in metropolitan areas.<sup>18</sup>

- 5.20 The Onkaparinga Council highlighted the changing industries which regional areas support and stated:

South Adelaide has seen some major shifts in its economic fortunes since the mid-2000s with the closure of some of its largest businesses, Exxon Mobil and Mitsubishi. Our response to that was to prepare the Southern Adelaide Economic Development Plan, which focused on diversifying and modernising the economy. This will be based more and more on trade in ideas and knowledge, and high-speed broadband is critical component of this.<sup>19</sup>

- 5.21 Multiple witnesses commented that Australian and global demand (from both the consumer and from a business perspective) is moving more and more to an online platform.<sup>20</sup> The Council was of the view that 'the massive expected global growth in online business will be a significant catalyst for new business investment, formation and transformation into the 21<sup>st</sup> century'.<sup>21</sup>

- 5.22 Since the committee's visit, the Council, in partnership with the Willunga Business and Tourism Association, the Southern Success Business Enterprise Centre and the Onkaparinga Exporters Club has launched a series of workshops. The program aims to provide advice to small and medium-size businesses and not-for-profit organisations on:

... taking advantage of the NBN through such things as improving their online presence, transacting online, expanding their market and reach into the community and better servicing customers.<sup>22</sup>

- 5.23 The Council was awarded \$411,950 under the Digital Enterprise Program to develop such services in their community.

---

18 Allen Consulting Group, *Quantifying the economic gains of getting more Australian households online*, November 2010, pp 36–38.

19 Mr Dowd, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 1.

20 Mr Dowd, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 1; Mr Laing, Willunga Business and Tourism Association, Transcript of Evidence, Willunga, 30 April 2012, p. 7.

21 Mr Dowd, City of Onkaparinga, Transcript of Evidence, Willunga, 30 April 2012, p. 1.

22 Conroy, S (Minister for Broadband, Communications and the Digital Economy) 2011, *Call for Applications for Digital Economy Initiatives*, media release, Parliament House, Canberra, 8 September.

## Customer Support in Transition

- 5.24 Importantly, Mr Thomas Laing reported his initially unsatisfying experience of connecting to the NBN following its rollout in Willunga and stated:

In my own case I was really frustrated. I waited until September-October. I was with Telstra and I had no response and no indication from them about things. I went to iiNet. They were not able to service me straight away. That was in October. I went back to them in December and they kicked it into gear in January. If [ISPs] had had a tech bloke on the ground, it might have got sorted out a lot more quickly.<sup>23</sup>

- 5.25 Further, Mr Laing also commented on the download speeds offered and stated:

We are on the 25/5 [25Mbps downlink/5Mbps uplink] plan and that is not much better than dial-up or what we were on with ADSL. So the promises about speed and reliability are suspect and questionable. But, as I say, those who are on the high-speed plans - the 50 or 100 plans - are not complaining at all.<sup>24</sup>

- 5.26 As more consumers are connected to the NBN, the committee hopes that the rate of competition within the sector will increase so that affordable, high-speed plans that maximise the speed of the network will be offered.

## Fixed Wireless Services

### Background

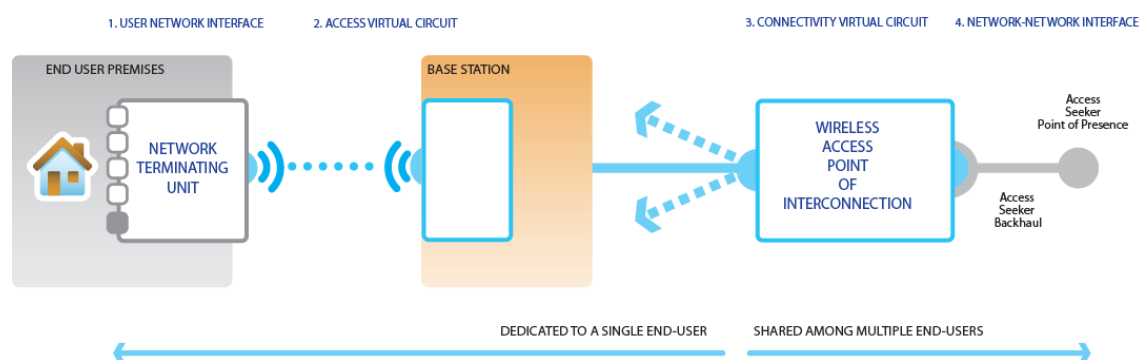
- 5.27 The NBN Co Wireless Access Service (WAS) consists of a number of components that will be used by access seekers to supply services to retail service providers (RSPs) or end-users. These include a network terminating unit (the NBN box that is located within individual premises), a base station antennae located externally on the premises, and a wireless access point of interconnection (a wireless tower). Figure 5.2 shows the different components.

---

23 Mr Laing, Willunga Business and Tourism Association, Transcript of Evidence, Willunga, 30 April 2012, p. 7.

24 Mr Laing, Willunga Business and Tourism Association, Transcript of Evidence, Willunga, 30 April 2012, p. 7.

Figure 5.2 Overview of the NBN Co Wireless Product



Source NBN Co, *Corporate Plan 2011-2013*, page 95.

5.28 The NBN Co Corporate Plan 2011-2013 identifies that the WAS will deliver speeds of 12 megabits per second (Mbps) downstream and 1Mbps upstream, and become available in the second half of 2012, with full rollout of the service occurring progressively over the period 2012-2015.<sup>25</sup> The deployment of the wireless network is scheduled to be completed by mid 2015.<sup>26</sup>

5.29 Importantly, there has been a degree of public confusion about whether the WAS will operate in similar ways to current mobile telephone wireless services. This confusion is understandable as the average consumer is unlikely to be aware of the infrastructure supporting their service, and the perception that a 'wireless' service will grant 'mobility'. The WAS will operate as a fixed wireless service.

5.30 A fixed wireless service differs from mobile wireless networks as a fixed service is designed to support a dedicated number of premises, each with a wireless receiver affixed externally to the property. This enables the delivery of a more predictable level of service performance to premises compared to a mobile wireless network which is focussed on mobility.<sup>27</sup>

5.31 On the issue of speed on the WAS, the Berrigan Shire Council relayed information provided to them from the NBN Co and stated:

They said they would be able to do everything that would be likely to be required for our community. ... They said that should be more than sufficient for what you need in terms of the speed we require.<sup>28</sup>

25 NBN Co, *Corporate Plan 2011-2013*, p. 95.

26 NBN Co, 2012, *Fibre Servicing Area Scheduling Rules*, 30 April 2012, <www.nbnco.com.au>, viewed 9 May 2012.

27 NBN Co, 2011, *NBN Co selects fixed wireless network partner for mid-2012 service start*, media release, 1 June.

28 Mr Matthew Hansen, Director, Corporate Services, Berrigan Shire Council, Transcript of Evidence, Sydney, 16 April 2012, p. 24.

5.32 The NBN Co confirmed:

The service will be identical everywhere in the wireless footprint – as close as you can get with technology. There will be no difference whether a wireless service is delivered in remote Australia or if it is delivered just outside a city.<sup>29</sup>

## Rollout Progress

5.33 In August 2011, the NBN Co announced the first release sites for the WAS: Geraldton (Western Australia), Toowoomba (Queensland), Tamworth (New South Wales), Ballarat (Victoria) and Darwin (Northern Territory).<sup>30</sup> The Shareholder Ministers' second NBN rollout Performance Report (the Performance Report) stated that as of 31 December 2011, the NBN Co had commenced construction in twelve wireless first release sites.<sup>31</sup>

5.34 As at 31 December 2011 the NBN Co had work under way for 1,952 premises in the wireless footprint. The NBN Co defines 'work under way' as the 'number of premises in rollout areas currently undergoing construction activities, where NBN Co has issued a Contract Instruction to a Subcontractor, but it is not deemed passed'.<sup>32</sup>

5.35 The WAS will require the use of approximately 2300 masts or wireless monopole towers. Where possible, the NBN Co has committed to using existing telecommunications masts and any new constructions will require development approval from the relevant local government authority.<sup>33</sup>

## Trial Phase

5.36 As the wireless access service enters the next phase, the NBN Co has commenced trials for RSPs. The NBN Co Wireless Trial Agreement provides for RSPs to participate in the two test and trial phases of the WAS. The first phase involved a business readiness testing phase in Armidale, occurring in February and March 2012. Twelve RSPs submitted requests to participate in the first test, with five providers selected to participate based on a structured process and 'rigorous selection criteria'.<sup>34</sup>

---

29 Mr Mike Quigley, Chief Executive Officer, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 50.

30 NBN Co, 2011, *First communities for NBN fixed wireless service unveiled*, media release, 3 August.

31 Shareholder Ministers, 'Performance Report to 31 December 2011' *Submission 12*, p. 12.

32 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 28.

33 NBN Co, 2011, *NBN Co selects fixed wireless network partner for mid-2012 service start*, media release, 1 June.

34 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 9.

- 5.37 A second phase began on 2 April 2012 and will run until 30 September 2012. The second test is available to all access seekers. The second trial will occur in an expanded number of first release sites (Armidale, Tamworth and Toowoomba) and allows both NBN Co and access seekers to test and verify their products, systems and processes.<sup>35</sup>

## Satellite Access Service

### Background

- 5.38 The NBN Co Satellite Access Service (SAS) will include product features such as increased capacity and return path speeds that are designed to support large file transfers and real time video communications.<sup>36</sup> The Performance Report stated:

The satellites... will provide around three per cent of Australian premises outside of areas covered by fibre and fixed-wireless technologies with access to high-speed broadband. The satellites are designed to provide initial peak speeds of 12/1 Mbps [12 Mbps download/1Mbps uplink].<sup>37</sup>

- 5.39 Similar to the WAS, the SAS consists of a number of components which are used by access seekers to provide a service to consumers. The two major components of the SAS are the space segment and the ground segment. In addition there is also local infrastructure installed on each of these premises.
- 5.40 The satellites will provide service to remote Australia, as well as coastal islands and external territories including Norfolk Island, Lord Howe Island, Cocos and Keeling Islands, Christmas Island and Macquarie Island in Antarctica. These services will be provided to the 'final 3 per cent' of premises falling outside of the fibre or fixed wireless footprints.<sup>38</sup>
- 5.41 The NBN Co expects that the number of premises falling within the satellite servicing area will grow from 332 000 (current) to 399 000 by

---

35 NBN Co, 2012, *Wireless Trial Agreement*, <[www.nbnco.com.au](http://www.nbnco.com.au)> viewed 29 February 2012.

36 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 26.

37 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 13.

38 NBN Co, 2012, *NBN Co selects Space Systems/Loral for communications satellites*, media release, 8 February.

2025.<sup>39</sup> The NBN Co Corporate Plan 2011-2013 estimates the following cumulative take up rates:

- 106 000 by financial year (FY) 2021
- 120 000 by FY 2025
- 139 000 by FY 2030.<sup>40</sup>

5.42 Reflecting an increase in the number of premises in the satellite footprint, the NBN Co released revised cumulative take up forecasts of:

- 129 000 by FY 2021
- 144 000 by FY 2025
- 170 000 by FY 2030.<sup>41</sup>

5.43 According to the Australian Communications Consumer Action Network (ACCAN), the SAS will provide better services to consumers. The ACCAN stated:

Certainly they provide a more reliable and faster speed, based on the advertised information.<sup>42</sup>

5.44 However, the Performance Report clarified:

Speeds actually achieved by retail customers (end users) will depend on a number of factors including the quality of their equipment and in-premises connection, the broadband plans offered by their Access Seeker and how their Access Seeker designs its network to cater for multiple end users.<sup>43</sup>

## Infrastructure

### Space Segment

5.45 On 8 February 2012, the Prime Minister and the Minister for Broadband, Communications and the Digital Economy announced that Space Systems/Loral had been awarded the contract for the build of the two satellites of the SAS space segment.<sup>44</sup> The design for the spacecraft was

---

39 NBN Co, Answers to Questions on Notice: Question No 285, Senate Standing Committee on Environment and Communications, Additional Estimates Hearing, February 2012.

40 NBN Co, Answers to Questions on Notice: Question No 285, Senate Standing Committee on Environment and Communications, Additional Estimates Hearing, February 2012.

41 NBN Co, Answers to Questions on Notice: Question No 285, Senate Standing Committee on Environment and Communications, Additional Estimates Hearing, February 2012.

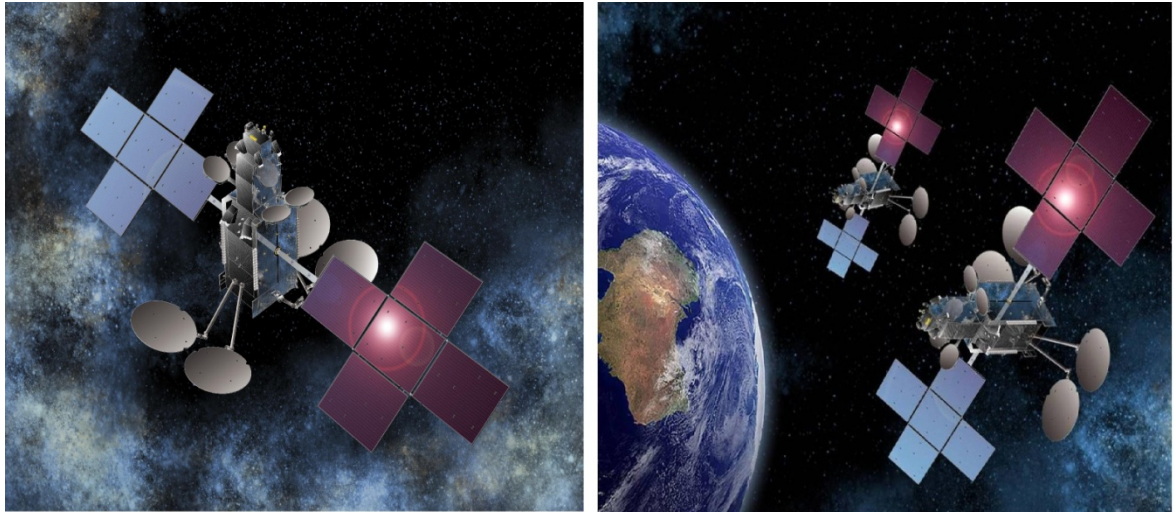
42 Mr Jonathan Gadir, Senior Policy Adviser, Australian Communications Consumer Action Network (ACCAN), Transcript of Evidence, Sydney, 16 April 2012, p. 4.

43 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 21.

44 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 13.

developed by the NBN Co, with refined technical requirements developed 'through detailed engagement and high level design with participating suppliers'.<sup>45</sup> The contracting process for the satellite infrastructure is discussed in Chapter 4.

Figure 5.3 Space Segment of the NBN Co Satellite Access Service



Source NBN Co, 'NBN Co selects Space Systems/Loral for communications satellites' Media Release, 8 February 2012.

- 5.46 The satellites will individually be able to service 200,000 premises in regional and remote areas of Australia and its external territories. The two satellites will be able to 'load share'<sup>46</sup> to enable optimal services, speeds and reliability.<sup>47</sup>
- 5.47 As the NBN Co is building a nationally-owned, wholesale-only network, the dimensioning of the satellites will differ to that of commercial operators. The NBN Co provided the following evidence on the dimensioning capacities of the satellites:

It is not so much speeds; it is a question of the greater the number of subscribers you have. How many gigabytes per month can be delivered reliably to them? ...What we have done is taken a different approach, which is to say: given the coverage, given the number of users we expect to be on this and given the satellite capacity, how do you make sure you manage that capacity so that people in the bush will get a good service?<sup>48</sup>

45 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

46 Mr Quigley, NBN Co, Transcript of Evidence, Senate Environment and Communications Legislation Committee, Canberra, 14 February 2012, p. 174.

47 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 56.

48 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 52.



- 5.48 The satellites will be launched separately, with the first launching in the first quarter of 2015 and the second being launched at a later date. The NBN Co is yet to determine when the second satellite will be launched.<sup>49</sup> Services will then be available to consumers by mid 2015.<sup>50</sup>

### Orbital Slot Allocation

- 5.49 The International Telecommunications Union (ITU) is responsible for international cooperation in the use of telecommunications and the radiofrequency spectrum, and more specifically, is the international mechanism coordinating the allocation of satellites' orbital slots.
- 5.50 The ITU is required to allocate spectrum, and register frequency allocation, orbital positions 'to avoid harmful interference between radio stations of different countries'.<sup>51</sup> This task is based on the regulatory procedures of coordination, notification and registration. Under this system, telecommunications companies launching satellites apply to the ITU's Radio Communication Bureau and lodge a request for a specific orbital slot. It is then open to other members of the ITU to lodge objections to that specific slot being allocated to the applying member.
- 5.51 The DBCDE commented on this process and stated:
- The ITU process is a coordination process for people to register objections ... [I]f there is any suggestion that another party has an interest in this then negotiations will occur but the satellite development process will not be stopped.
- This is an administrative coordination process designed to ensure you do not end up with conflicting outcomes rather than one in which you can obtain an approval and sell it to another party.<sup>52</sup>
- 5.52 The NBN Co has lodged coordination applications with the ITU for four orbital slots for its two commissioned satellites.<sup>53</sup> However, these slots are yet to be secured from the ITU. According to the Government, the confirmation process 'continues with both domestic and international operators'.<sup>54</sup>
- 5.53 The absence of formal allocation from the ITU is controversial as the final orbital slot and frequency allocation affects the design and construction of the satellites. The NBN Co commented:

---

49 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 57.

50 NBN Co, *Submission 15.2*, Answers to Questions on Notice No. 15, p. 7.

51 International Telecommunications Union, *Constitution*, Article 1(2).

52 Mr Peter Harris, Secretary, DBCDE, Transcript of Evidence, Sydney, 16 April 2012, p. 63.

53 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

54 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

You need to tie down the VSAT uplink and downlink frequencies as well as the gateway uplink and downlink frequencies and you need to know where the satellites are going to be located. That absolutely impacts the radio planning.<sup>55</sup>

- 5.54 In awarding the satellite construction contract to Space Systems/Loral, the NBN Co has proceeded on the basis that the orbital slots and frequencies applied for will be allocated. The NBN Co was unable to confirm that the satellites will not be launched until the slots have been formally allocated. The NBN Co stated:

No, I am not prepared to say that. ... If we came to the position where the formalities were not completely finalised, we would probably have a discussion with the ITU about the possibility of launching.<sup>56</sup>

- 5.55 The NBN Co also confirmed that in the event that an orbital slot is not obtained, it would contract to launch the satellites (a contract that is yet to be awarded).<sup>57</sup> The NBN Co also stated that it:

... is not aware of any satellite operator's launch provider being stopped from launching their Satellite by the ITU.<sup>58</sup>

- 5.56 Further, the NBN Co stated:

It is not unprecedented that [a telecommunications company] will have a satellite in orbit before the formality of the process is complete. We do not anticipate that ... We expect formalities will be completed well before we launch any satellites. ... We expect that process, the ITU coordination process, to be finished well before a launch date.<sup>59</sup>

- 5.57 The effect on the anticipated launch date of 2015 and the cost of additional works on the satellite is unclear, though the NBN Co stated:

It is not a question of scrapping the satellite and starting again.<sup>60</sup>

## Gateway Segment/Ground Stations

- 5.58 The second major component of the SAS is the gateway segment. The SAS will require approximately ten ground stations built around Australia to

---

55 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 53.

56 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 64.

57 NBN Co, *Submission 15*, Answer to Question on Notice No. 2, p. 2.

58 NBN Co, *Submission 15*, Answer to Question on Notice No. 3, p. 3.

59 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, pp 53-54.

60 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 65.

- receive and transmit data signals.<sup>61</sup> Data is sent to the satellite from a large ground station transmitter, and the satellite ‘bounces’ this information down to the end-users’ very small aperture terminal (VSAT) satellite dish.
- 5.59 The gateway segment will be completed before the launch of the satellites in mid 2015.<sup>62</sup>
- 5.60 On the progress of the ground stations’ construction and development, the Performance Report stated that as of 31 December 2011:
- The ground systems and customer equipment RFT [requests for tender] responses were also received and were being evaluated. Feasibility, quantity surveying and preliminary town planning work commenced on a list of potential radio frequency (RF) gateway sites across the country.<sup>63</sup>
- 5.61 Since the Performance Report, Merimbula, on the New South Wales (NSW) far south coast was announced as the first satellite ground station gateway.<sup>64</sup> Construction of the facility is due to begin in 2013, and is scheduled to be operational in 2015.<sup>65</sup> The smaller town of Wolumla, located 15 kilometres north-west of Merimbula, will be the site for six satellite dishes.<sup>66</sup>
- 5.62 Significantly, the NBN Co explained its reasons for selecting Merimbula as the location of the first satellite ground segment and stated:
- Merimbula was chosen for a number of reasons: the climate is perfect for our needs. It’s also located close to reliable power and other infrastructure including the NBN’s core fibre transit network.<sup>67</sup>
- 5.63 The issue of climate and weather conditions as a potential impediment to reliable high-speed internet was first raised in the committee’s Second Review by M&S Consultants Pty Ltd. M&S Consultants Pty Ltd stated that Ka-band satellites suffer from ‘rain fade’, and therefore may not be suitable for humid regions as signals cannot penetrate areas of high precipitation.<sup>68</sup>

---

61 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April.

62 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 15, p. 7.

63 Shareholder Ministers, ‘Performance Report to 31 December 2011’, *Submission 12*, p. 12.

64 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April.

65 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April.

66 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April.

67 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April.

68 Mr Michael Wilson, Director, M&S Consultants Pty Ltd, Transcript of Evidence, Broken Hill, 27 July 2011, p. 12.

- 5.64 In May 2012, the NBN Co also announced Bourke in the north-west of NSW as being the second location for the SAS ground station gateway. Again, the NBN Co referred to Bourke's 'ideal climate' as being a factor when selecting the site.<sup>69</sup> The facility in Bourke will comprise of 'a single storey building with up to three 13-metre-in-diameter satellite dishes'.<sup>70</sup>
- 5.65 When making both announcements, the NBN Co stressed that the selection of sites was done 'following extensive consultation' with the relevant local government councils.<sup>71</sup> The announcement of Merimbula and Bourke as prospective sites came before development applications for their construction has been approved by local governments. The NBN Co have committed to providing local residents with more information.<sup>72</sup>

### Infrastructure on Premises

- 5.66 The SAS will also require individual premises to have roof-mounted receivers (VSAT dishes) installed so to receive signals from the satellites. Images of this infrastructure are included in Figure 5.4.
- 5.67 Similar equipment is needed for those consumers accessing the NBN Co's Interim Satellite Service (ISS) (discussed below). Importantly, for those premises that have ISS-accessible local infrastructure installed, this equipment will need to be replaced to access the (long-term) SAS due to the technology differences between the two services.<sup>73</sup>

---

69 NBN Co, 2012, *NBN satellite network extends to the outback*, media release, 10 May.

70 NBN Co, 2012, *NBN satellite network extends to the outback*, media release, 10 May.

71 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April; NBN Co, 2012, *NBN satellite network extends to the outback*, media release, 10 May.

72 NBN Co, 2012, *NSW Far South Coast enters space age*, media release, 19 April; NBN Co, 2012, *NBN satellite network extends to the outback*, media release, 10 May.

73 NBN Co, *Submission 15.2*, Answer to Question on Notice No. 15, p. 7.

**Figure 5.4** Roof-mounted National Broadband Network Satellite Receiver

Source NBN Co, 'Gallery: What an NBN satellite installation looks like' <[www.nbnco.com.au](http://www.nbnco.com.au)> viewed 28 February 2012.

## Interim Satellite Service

5.68 Whilst the infrastructure discussed above is under construction, the NBN Co is providing its ISS on existing third-party owned satellites with speeds of 6Mbps download and 1Mbps uplink. The committee has previously reported on the ISS in its Second Review.

5.69 Launched on 1 July 2011, the ISS trial phase was completed in November 2011. As at 31 December 2011, the ISS covers 165,000 premises, with 2197 premises actively serviced by RSPs.<sup>74</sup> The Performance Report also provided the following updates:

- to ensure mitigation of any implementation issues, since launch, close monitoring of the product content and performance of the satellite service;
- as at 31 December 2011, there were seven RSPs selling services over NBN Co's interim satellite network and there were 2197 active premises; and
- additional satellite capacity was commissioned by using the IPStar satellite.<sup>75</sup>

5.70 On the issue of affordability of services, the ACCAN stated:

... as the interim satellite service, for example, becomes a permanent satellite service, the ISPs are going to be able to offer better rates.<sup>76</sup>

74 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 28.

75 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 12.

- 5.71 Although access to the ISS is limited to certain criteria (residents and small businesses located in regional and remote Australia who are unable to access metro-equivalent broadband), it may be this criteria that is dissuading otherwise eligible applicants from submitting requests.<sup>77</sup>
- 5.72 The public education and marketing of the ISS could be an early opportunity for eligible regional and remote communities to begin the transition envisaged under the National Digital Economy Strategy. It is also an opportunity for the NBN Co to begin its marketing of the (long-term) SAS with connected end-users gaining direct experience in faster broadband and the changes and challenges this brings to community.

## Telephony, Broadband and Black Spots

- 5.73 An ongoing concern raised by regional and remote Australia is the existence of black spots, both in relation to the accessibility of broadband services and the reliability of mobile telephone coverage. In relation to broadband services, the DBCDE stated:
- As NBN Co's next-generation satellite service provides a safeguard to all Australian premises not receiving a fibre or wireless service, there will be no broadband 'black spots' when the NBN is deployed.<sup>78</sup>
- 5.74 More importantly, there appears to be widespread misunderstanding that the NBN rollout will also provide an upgrade to telephony services around Australia. For example, submissions to the 2011-12 Regional Telecommunications Independent Review raised concerns that existing 'black spots' in mobile telephone and broadband coverage will not be resolved under the NBN rollout.<sup>79</sup>
- 5.75 Although premises in the fibre footprint will see a transfer of telephony from copper cables to fibre, and the quality of voice over internet protocol (VOIP) services will improve on all three technologies (fibre, fixed

---

76 Mr Gadir, ACCAN, Transcript of Evidence, Sydney, 16 April 2012, p. 6.

77 Senator the Hon Stephen Conroy, the Minister for Broadband, Communications and the Digital Economy, announced in an opening statement at the Budget Estimates hearing of the Senate Standing Committee on Environment and Communications on 24 May 2012 that the eligibility criteria for the ISS would be expanded. The expanded criteria will extend the eligibility of the ISS to approximately 250 schools, 800 health clinics and 200 local government facilities.

78 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, p. 1.

79 State Government of Victoria, *Submission to the Regional Telecommunications Review*, December 2011, p. 20.

wireless and satellite),<sup>80</sup> existing fixed-line telephony services in areas outside of the fibre rollout will not be altered under the NBN rollout.

- 5.76 Existing infrastructure will provide fixed telephone line connections. Under an agreement between Telstra and the Government, commencing on 1 July 2012, Telstra is required to maintain its existing copper network in areas outside of NBN Co's fibre to the premises network to deliver the standard telephone service. This is Telstra's Universal Service Obligation.<sup>81</sup>
- 5.77 As a fixed-line-broadband-only initiative, the NBN rollout does not affect mobile-phone coverage in central-business districts, regional communities nor remote townships. The DBCDE stated:

Terrestrial mobile phone networks have expanded significantly in recent years – and coverage is now claimed to reach about 99 per cent of the Australian population. However, given Australia's vast size, this only means about 25 per cent of the actual landmass is covered. For the most part the recent extension of mobile coverage has been based on commercial decisions by carriers. There is currently no government funded program for the extension of mobile phone coverage.<sup>82</sup>

- 5.78 The DBCDE foreshadowed a possible use of the NBN Co's infrastructure by the sector and stated:

In terms of the NBN rollout improving mobile phone access, any new towers that NBN Co may construct for its fixed-wireless network could be accessed by mobile carriers to expand their footprint. NBN Co's next-generation fixed wireless and satellite services will support Voice over Internet Protocol (VoIP) telephone services. However, as these services are fixed services they will not support mobile telephony.<sup>83</sup>

## Maintenance and Upgrades

- 5.79 Since the initial concept of a nationally owned wholesale network was first announced, the flexibility of the network design to accommodate upgrades, and maintenance of the network as the infrastructure ages, have become important community issues.

---

80 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, pp 1-2.

81 NBN Co, 2011, *First communities for NBN fixed wireless service unveiled*, media release, 3 August.

82 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, p. 1.

83 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, p. 2.

- 5.80 The lifespan of the equipment of the fibre network (not including the fibre-optic cable itself) is anticipated to be 15 to 20 years, with upgrades expected before the end of this timeframe.<sup>84</sup>
- 5.81 The NBN Co stated,
- The design of the passive fibre access network is adaptable and flexible due to the use of International Standards for all of the connectivity points, and the provision of additional fibre to allow for the seamless integration of advancements in Passive Optical Network [PON] transmission technologies without major interruption to the operating end-users.<sup>85</sup>
- 5.82 Similarly, the design of the active network follows a ‘modular approach’ where sub-systems are adaptable and flexible due to the use of International Standards for all of the connectivity points. The active network provides for additional capabilities to allow for the seamless integration of advancements in PON transmission technologies without major interruption to the operating end-users.<sup>86</sup>
- 5.83 If commenced, the NBN Co foreshadowed that such an upgrade would likely target the delivery of faster speeds. The NBN Co stated:
- For example, the [Gigabit Passive Optical Networking] GPON, at the moment, is 2½ gigabits per second down, 1.25 gigabits per second up. Within three or four years it will be 10 gigabits per second down, five gigabits per second up, and then it will probably multiply by four again. So at some point in time we will obviously introduce that new capability and, at another point in time, we may find that, if demand increases, we will go and retrofit the equipment.<sup>87</sup>
- 5.84 Importantly, such upgrades to the fibre network will be demand driven, rather than applied ubiquitously over the entire network.<sup>88</sup>
- 5.85 In the rollout of the fixed wireless network, a core expectation of the NBN Co, as provided in the Government’s Statement of Expectations, is that it will monitor technological advances across fixed wireless platforms in order to upgrade its products.<sup>89</sup>

---

84 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 59.

85 NBN Co, *Submission 15.1* Answer to Question on Notice No. 11, p. 1.

86 NBN Co, *Submission 15.1* Answer to Question on Notice No. 11, p. 1.

87 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 59.

88 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 59.

89 Shareholder Ministers, ‘Performance Report to 31 December 2011’ *Submission 12*, p. 9.



5.86 A similar approach to upgrading the satellite service is likely to be pursued. The Performance Report stated:

Over time, it is expected that further services will be supported [on the Satellite Access Service] as NBN Co upgrades its networks and through other technological improvements.<sup>90</sup>

## Extending the Fibre Footprint

5.87 In its First and Second Reviews, the committee reported on the applications by private entities, individuals, and local and state governments to extend the fibre footprint to communities and premises that are expected to receive services via the fixed wireless or satellite infrastructure. This remains an issue.

5.88 Such concerns were raised by the Regional Development Australia – Northern Inland NSW which stated:

... for some communities it would be a backward step to go from ADSL2 to a wireless service. There are a number of examples in our region [that] do not reach the threshold to receive fibre. There is an argument that that particular population threshold could be relaxed such that homes and businesses that already have an ADSL connection through copper should be receiving a fibre service otherwise they risk taking a backward step.<sup>91</sup>

5.89 Other participants in the committee's inquiry, including the Berrigan Shire Council, the Redland City Council and Tatachilla Lutheran College, voiced similar concerns.<sup>92</sup>

5.90 The issue of extending the fibre footprint exposes the general community concern about the difference in quality between the services available on the fibre network to those available on the fixed wireless or the satellite services. For example, the Berrigan Shire stated:

We are particularly concerned to make sure that we do not again fall behind the rest of rural Australia in particular by not having access probably to the top level of connection under the NBN.<sup>93</sup>

---

90 Australian Government, February 2012, *Response to the Joint Committee on the National Broadband Network First Report on 31 August 2011*, p. 26.

91 Mr Nathan Axelsson, Executive Officer, Regional Development Australia Northern Inland NSW, Transcript of Evidence, Sydney, 16 April 2012, p. 18.

92 Mr Hansen, Berrigan Shire Council, Transcript of Evidence, Sydney, 16 April 2012, p. 22; Mayor of Redland City Council, *Submission 7*; Mr Paul Andrejic, Business Manager, Tatachilla Lutheran College, Transcript of Evidence, Willunga, 30 April 2012, pp 15-18.

- 5.91 Responding to the committee's recommendation in its Second Report calling for the formalisation and publication of the policy for extending the fibre footprint, on 1 February 2012 the NBN Co released the 'Network Extension Quote Method for the Tasmanian Trial'.<sup>94</sup>
- 5.92 The interim policy details the methodology of the NBN Co when developing quotes to extend the fibre network during the Network Extension trial in Tasmania. The trial will be for selected properties that bordered sites of Triabunna, Sorrell, Deloraine, St Helens and South Hobart in Tasmania.<sup>95</sup>
- 5.93 The Ministers also affirmed that the NBN Co's Network Planning and Design team will undertake studies to identify the incremental cost per premises to provide fibre.<sup>96</sup> However, as NBN Co has stressed previously, and restated by the Shareholder Ministers:
- ... preparing these costings around individual propositions is a significant diversion of resources. Therefore, NBN Co is only intending to do costings for locations contiguous with the rollout and when an application under a properly defined process is received. The network extension process needs to be scheduled to fit within the overall construction timetable for an area, preferably around the finalisation of network design documentation, so that the overall costs of network extension on both end-users and the company are minimised and the process is able to be accommodated in an efficient and effective manner.<sup>97</sup>
- 5.94 The outcomes of the network extension trials were not clear at the time of writing.

## Concluding Comments

### Fibre and Regional Australia

- 5.95 The committee commends the energy and enthusiasm of regional communities for seizing the opportunities and confronting the challenges

---

93 Mr Hansen, Berrigan Shire Council, Transcript of Evidence, Sydney, 16 April 2012, p. 22.

94 NBN Co, 'Network Extension Quote Method for Tasmanian Trial', <[www.nbnco.com.au](http://www.nbnco.com.au)>, viewed 7 May 2012.

95 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 6.

96 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 6.

97 Australian Government, April 2012, *Response to the Joint Committee on the National Broadband Network Second Report on 24 November 2011*, p. 6.

that high-speed broadband will create. Local governments, businesses, schools and residents are at the forefront of setting the direction, and scoping the parameters of e-governance, e-education, and e-commerce in Australia for the future.

- 5.96 As the national discussion progresses to how the NBN will transform Australia's digital economy, and precisely what activities the infrastructure will support, it is imperative that those communities that are setting the parameters and scoping the direction of what the NBN will bring, engage in greater connectivity with their counterparts both in Australia and around the world.
- 5.97 First release sites in particular, are at the forefront of defining what types of services, activities and applications the NBN will bring to individuals, families, businesses, local governments, schools and hospitals. These communities will set the example for later-connecting communities, and their successes, challenges and the lessons learned should be shared and communicated among the network of NBN-connected areas.
- 5.98 Consequently, it is important that councils and community organisations alike work collaboratively and establish mechanisms for the exchange of ideas that will assist them to be e-ready once they become connected to the network. The committee notes the role that the Australian Local Government Association could play in this regard, and the national leadership required of the Government.

#### Connection Difficulties

- 5.99 It is concerning that consumers are experiencing problems with retail service providers such as connection activation delays and dropouts. As the rollout progresses, the volume of customers – whose relationship is with RSPs, not with the NBN Co – will significantly increase, placing greater consumer expectations upon those providing services. However, the committee expects that as RSPs become more familiar with the infrastructure and the types of consumer support that is required, the consumer experience will also improve.

#### Fixed Wireless Services

- 5.100 Within the WAS footprint, user-mobility has been compromised for the guarantee of consistent speed within the wireless cell. Yet the NBN Co and industry see the absence of mobility throughout the fixed line network as being complementary to industry-operated mobile wireless services.
- 5.101 Community clarification of the distinction between fixed wireless and mobile wireless networks is particularly important as the rollout of the

WAS progresses from design and build, to a phase where consumers are beginning to seek services from RSPs.

### Terminology

- 5.102 The committee notes possible expectations in the community that the fixed wireless and satellite services will support certain activities, such as mobile roaming. It is important that all communities in the WAS and SAS footprints are aware that basic telephony services and mobile telephony will continue on current infrastructure, or alternatively, a service provider might offer VOIP services.
- 5.103 Providing this clarity to residents and businesses in these areas is particularly important in light of the extensive public education initiatives for communities in the fibre footprint that will focus on the positive steps all consumers will need to take in this regard.

### Reliability of Satellite Signals

- 5.104 While climate was a consideration for the site selection of the ground station satellite, there are still questions surrounding the penetrability, and hence reliability, of the SAS. This raises concerns about the quality of SAS operability into the future, which may have a negative impact on the NBN satellite network. The committee will continue to monitor this issue.

### Take Up of the Interim Satellite Service

- 5.105 It is concerning that in the last reporting period, the take up rate of the ISS is less than 1.5 per cent of premises available for services. This may indicate either a delay in installations to those end-users seeking services, or low-levels of public awareness of the service. A third possibility is that residents and businesses eligible for the ISS do not believe the service is appropriate for their needs, budgets or daily activities.

### Telephony, Broadband and Black Spots

- 5.106 The committee asked the DBCDE if the NBN infrastructure could be reconfigured to allow improvements in mobile telephony services. In its response the DBCDE did not answer this question.<sup>98</sup> Rather, the DBCDE referred the committee to satellite mobile phones as 'an alternate means to accessing mobile communications' and stated that the Government's Satellite Phone Subsidy Scheme exists to improve the affordability of these handsets.<sup>99</sup>

---

98 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, pp 1-2.

99 DBCDE, *Submission 3.1*, Answer to Question on Notice No. 12, pp 1-2.

- 5.107 The lack of clarity surrounding the role of the NBN in supporting telephony, particularly mobile telephony, may lead to unfounded expectations within the community. Given that telephony in many regional and remote areas of Australia is still inferior to what is available in urban centres, this is entirely understandable.

#### Maintenance Works

- 5.108 The security of the network was discussed in Chapter 4. However, it is important to note the role that maintenance plays in providing a secure environment for end-users.
- 5.109 Whether the Australian workforce has the skills set to be able to carry out maintenance works is an issue that the committee will look to examine in its next review.

#### Extending the Fibre Footprint

- 5.110 Concerns about the extension of the fibre footprint suggests reticence on part of the community that a logical and equitable approach is taken by the NBN Co when deciding which communities are deemed to receive fibre and those that will receive fixed wireless or satellite services.
- 5.111 In its Second Report, the committee recommended that the NBN Co formalise and publicise its policy for the provision of costing extensions to the fibre footprint for the communities falling within WAS and SAS areas. The NBN Co has issued what appears to be an interim policy for Tasmanian communities seeking an extension of the fibre footprint.
- 5.112 Given the size and complexity associated with such applications, a trial of this system and policy has merit. However, this policy must be formalised and also made available to communities on mainland Australia. Importantly, as the fixed wireless and satellite services are progressing to a construction phase, these communities seeking an extension to the fibre footprint will be placed under a significant time restraint.
- 5.113 Although the NBN Co's approach may be a logical and resource efficient, the point at which the NBN Co consults with communities is at the final stage of the development of network design, leaving little time for communities to develop such applications. Many individuals or businesses learn of the decision upon the NBN Co's announcement – a point at which a decision appears to be final and not open to further negotiation despite what has been stated by the Shareholder Ministers.

**Recommendation 9**

- 5.114 **The committee recommends that the NBN Co revise its terminology and language to clarify community understanding of what the three National Broadband Network services can and cannot support, to enable the community to prepare for the network's services appropriately and become fully informed.**

**Recommendation 10**

- 5.115 **The committee recommends that the NBN Co include in its web-based interactive rollout map specific information on the provision of voice services for communities in fixed wireless and satellite access areas.**

**Recommendation 11**

- 5.116 **The committee recommends that the NBN Co finalise its policy for the provision of costing extensions to its planned National Broadband Network fibre footprint:**
- **And publicise the policy and its process for communities in the fixed wireless and satellite service areas; and**
  - **At the point of announcing new areas within these footprints, ensure that the policy is attached to media releases and known to the relevant local government associations.**

## Private Equity Funding and Telstra Workforce Issues

### Introduction

- 6.1 At the start of the Third Review, the committee adopted a working group structure, to enable it to focus on several topical issues under its broad terms of reference, including:
- The potential of private equity to fund the National Broadband Network (NBN); and
  - Telstra workforce issues in the context of the rollout of the NBN.
- 6.2 These issues were identified for future inquiry in the First Report and initially reported on in the Second Report.
- 6.3 The committee has investigated these two matters in some detail over the third reporting period and its findings are discussed below. Given the ongoing significance of these areas, the committee will also continue its inquiries into these matters over the fourth reporting period.

### Private Equity Funding

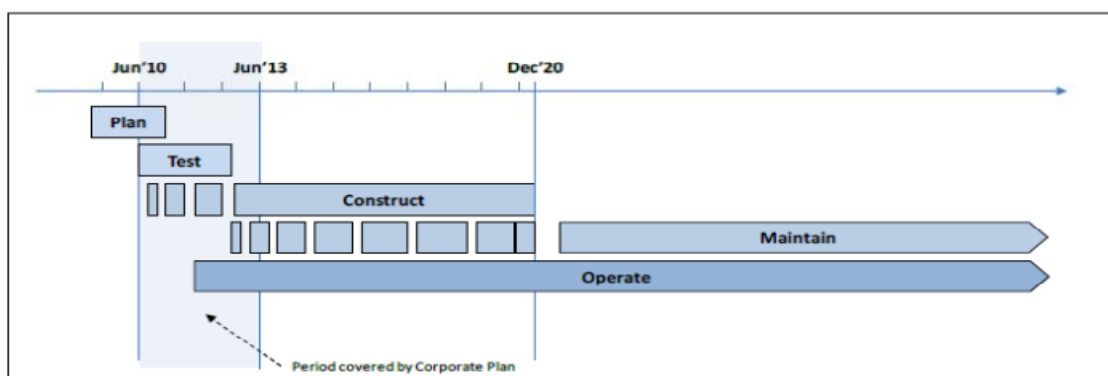
#### Background

- 6.4 This section of the report considers issues associated with private equity engagement in funding the NBN. Government funding of the NBN over

the rollout period, under the equity agreement between the Government and NBN Co, is discussed in Chapter 2.

- 6.5 On 22 June 2011, the Government and NBN Co entered into a funding agreement, whereby the Government provided assurances to NBN Co that it would provide equity funding to NBN Co until 30 June 2021, unless the agreement was terminated earlier.<sup>1</sup> Total Government funding pursuant to the agreement is capped at \$27.5 billion.<sup>2</sup> As at 31 December 2011, the Government had made a total of \$2.482 billion available to NBN Co, of which \$1.12 billion has been provided in the current financial year.<sup>3</sup>
- 6.6 The committee continues to be interested in when and how private equity might be engaged in funding the NBN wholesale platform, and at what financial return to the Government and, ultimately, taxpayers. The current timeline for the NBN project is set out at Figure 6.1.

Figure 6.1 National Broadband Network Long-term Timeline Commencing in June 2010



Source NBN Co Corporate Plan 2011–2013, p. 22.

## First and Second Reports

- 6.7 The First Report signalled the committee's intention to examine the potential of private equity to fund the NBN. The committee was particularly interested in the issue of when and how private equity might be engaged in the wholesale platform.
- 6.8 The committee concluded that it would 'seek further information on how private equity will be attracted, used and repaid to the Government on its

1 Shareholder Ministers, 'Performance Report to 30 June 2011', *Submission 19* to the Second Review by JCNBN, p. 5.

2 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, p. 22.

3 Shareholder Ministers, 'Performance Report to 31 December 2011', *Submission 12*, 'Financials (unaudited)', p. 22.



NBN investment'.<sup>4</sup> In particular, the committee was interested in whether there are 'options available to NBN Co to engage private equity through the construction phase of the NBN, to enable a return to taxpayers sooner'.<sup>5</sup>

- 6.9 In the Second Report, the committee sought information on 'whether it would be in the national interest to bring forward the timeframe for private equity engagement'.<sup>6</sup> Drawing on the McKinsey & Company/KPMG *Implementation Study*,<sup>7</sup> the Department of Broadband, Communications and the Digital Economy (DBCDE) advised that:

On balance, the Implementation Study recommended that the government should fund NBN Co with equity investments until NBN Co can raise its own investment-grade debt and pay interest from its own cash flow ...

...private equity should not be introduced before privatisation as it will be too expensive and constrain Government's ability to get its policy and regulatory settings right before allowing private ownership.<sup>8</sup>

- 6.10 The committee was also interested in the 'cost/benefit to the economy of bringing forward the introduction of private equity'.<sup>9</sup> The DBCDE advised that the *Implementation Study* had concluded that 'private equity will be more expensive than government equity' in funding the NBN.<sup>10</sup>
- 6.11 Noting this advice, it was concluded that 'more work need[ed] to be done in detail' on the issue of private sector engagement and that investigation of this matter would therefore be continued over the third reporting period.<sup>11</sup>

---

4 Joint Committee on the National Broadband Network (JCNBN), *Review of the Rollout of the National Broadband Network: First Report*, August 2011, pp 54-55.

5 JCNBN, *Review of the Rollout of the National Broadband Network: First Report*, August 2011, p. 55.

6 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. 73.

7 McKinsey & Company/KPMG, *Implementation Study*, May 2010  
<[www.dbcde.gov.au/broadband/national\\_broadband\\_network/national\\_broadband\\_network\\_implementation\\_study](http://www.dbcde.gov.au/broadband/national_broadband_network/national_broadband_network_implementation_study)>.

8 Department of Broadband, Communications and the Digital Economy (DBCDE), *Submission 3.3, Second Review of the JCNBN, Answers to Questions on Notice Nos 6.3-6.4*, p. 2.

9 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. 74.

10 DBCDE, *Submission 3.3, Second Review of JCNBN, Answers to Questions on Notice Nos 6.3-6.4*, p. 2.

11 JCNBN, *Review of the Rollout of the National Broadband Network, Second Report*, November 2011, p. iv.

## Current Report

- 6.12 Following the Second Review, the committee was interested in more closely examining the following issues:
- the possibility of bringing forward a timeframe for private equity engagement in funding the NBN, within the existing legislative framework
  - further testing the cost/benefit of bringing forward a timeframe for private equity engagement in funding the NBN
  - NBN Co's debt financing arrangements.

## Existing Legislative Framework

6.13 The committee was interested in whether, under the existing legislative framework for the NBN, a timeframe for private equity engagement in funding the NBN might be brought forward during the construction phase, thereby enabling an earlier return to taxpayers.

6.14 In its submission, the DBCDE explained that:

The introduction of any non-Commonwealth direct interest in the share capital of NBN Co would be inconsistent with the existing legislative provisions and social policy objectives ... The Government does not intend to sell the network or take on private equity other than in the circumstances outlined in the relevant legislation.<sup>12</sup>

6.15 In terms of the existing legislative provisions, NBN Co was established as a company under the *Corporations Act 2001* (Cth) in April 2009 and is governed by the provisions of that act. Further, as a company with shares that are owned by the Australian Government, NBN Co is subject to the provisions of the *Commonwealth Authorities and Companies Act 1997* (Cth). NBN Co is also governed by specific legislation, the *National Broadband Network Companies Act 2011* (Cth). This legislation 'sets out the circumstances in which the Commonwealth can dispose or transfer shares in NBN Co', including the following preconditions:

- declaration by the Communications Minister that the national broadband network should be treated as built and fully operational
- the conduct of a Productivity Commission inquiry into the regulatory framework for the network, impacts of a sale of the

---

12 DBCDE, *Submission 10*, p. 11.

Commonwealth's equity on the budget and the supply of broadband services and the impact on competition in the telecommunications market

- conduct of a parliamentary Joint Committee consideration of the Productivity Commission report
- declaration by the Finance Minister that conditions are suitable for the conduct of a sale
- expiry of a fifteen sitting day disallowance period without either House passing a resolution of disallowance.<sup>13</sup>

6.16 Following satisfaction of all these preconditions 'a sale of NBN Co can proceed'.<sup>14</sup> There are also provisions placing restrictions on the nature of capital in relation to NBN Co. These 'preclude a party other than the Commonwealth being able to exercise all the voting rights, holding any of the paid up share capital of NBN Co or holding any of the rights to any distribution of capital or profits'.<sup>15</sup>

## Policy Rationale and Cost/Benefit

6.17 As discussed above, a further reason put forward by the DBCDE to explain the difficulties in bringing forward a timeframe for private equity engagement in funding the NBN was that this would be 'inconsistent with ... social policy objectives'.<sup>16</sup> As the department observed:

There is a non-financial reason at work here ... For any private equity contribution to the project that was beyond the trivial level, the investor would be looking to have some control or influence over the use of the equity and its return, which inevitably would lead to the risk of policy compromises. The government is doing this primarily for policy reasons so it undermines the logic of using private equity.<sup>17</sup>

6.18 The department further pointed to the 'Executive summary' of the *Implementation Study* on this point:

Government should fund NBN Co solely with Government equity until NBN Co can raise its own investment-grade debt and pay interest from its own earnings. Private equity should not be introduced at least until the network roll-out is complete. To do so

---

13 DBCDE, *Submission 10*, p. 9.

14 DBCDE, *Submission 10*, p. 9.

15 DBCDE, *Submission 10*, pp 9-10.

16 DBCDE, *Submission 10*, p. 11.

17 Mr Daryl Quinlivan, Deputy Secretary, DBCDE, Transcript of Evidence, Sydney, 16 April 2012, p. 50.

any earlier would be too expensive, in terms of the returns required by investors, and would constrain Government's ability to establish the right policy and regulatory settings.<sup>18</sup>

6.19 The department also highlighted a series of issues related to this point, affecting the cost/benefit of bringing forward a timeframe for private equity engagement in the NBN. The department explained that in the *Implementation Study* the Government had sought advice from McKinsey & Company/KPMG on the opportunities to attract private investment to the NBN, with a number of key factors affecting the use of private investment having been identified, including:

- the amount available for investment
- the returns required on investment
- the level of control required by the investor.<sup>19</sup>

6.20 As Mr Harris, the Secretary of DBCDE, confirmed:

...at this stage in the NBN, the premium for risk required for an equity investor would naturally be very high. KPMG wrote that very explicitly in the implementation study ... It is primarily driven by the fact that this is a very large project that will last for a very long time. It will take a significant amount of upfront losses before it starts to cover its costs. As a consequence, the premium for equity will be high. At this stage, the advice and implementation study from KPMG was pretty clear: do not try and draw down equity markets. We have not seen a reason to vary from that.<sup>20</sup>

6.21 In terms of the *amount available for investment*, the DBCDE explained that, while Australian superannuation funds have substantial funds available for investment, these are 'subject to quite rigid asset allocation regimes involving a heavy focus on diversification of exposure between types of investment and within investment types, between individual investments'. The size of individual investments is 'strongly biased towards low risk where returns are highly predictable'. Accordingly, for stable low-risk investments 'amounts in the hundreds of millions can be

---

18 McKinsey & Company/KPMG, *Implementation Study*, May 2010, p. 41 – quoted by DBCDE, *Submission 10*, p. 11.

19 DBCDE, *Submission 10*, p. 10.

20 Mr Peter Harris, Secretary, DBCDE, Transcript of Evidence, Sydney, 16 April 2012, p. 49.

available', but for higher risk investments 'the amounts are in the tens of millions or less depending on the state of development'.<sup>21</sup>

6.22 Against this background, the department concluded that:

Despite government sponsorship the NBN would be considered high risk for commercial finance sources because of project implementation risk and concerns about the telecommunications policy objectives driving the project.<sup>22</sup>

6.23 In terms of the *returns required on investment*, the DBCDE explained that required returns are 'highly sensitive to the state of development of the investment', with early stage investments requiring 'returns in the range 15-25 per cent'. However, as an investment develops and planned targets are achieved, 'the risk premium will reduce'. For the NBN, this involves:

...completion of the initial rollout, planned construction costs being achieved, services being taken up at the projected rates, data utilisation increasing consistent with historic trends and the regulatory framework for operation being locked in following the Productivity Commission review set out in the NBN legislation. When all those conditions have been satisfied, the returns required reduce to the 8-10 per cent range.<sup>23</sup>

6.24 The department again pointed to the *Implementation Study* on this matter:

Private investors value certainty and demand high risk premiums to compensate for perceived uncertainty in an investment business case. In the case of the NBN, this is expected to translate into private sector investors demanding returns in the early phases of NBN Co's network roll-out in the vicinity of 15 to 25 percent – well above expected project returns. To accommodate such financing, Government would need to accept a lower return on its equity, while implicitly bearing most of the risk given its commitment to the success of the NBN.<sup>24</sup>

6.25 Against this background, the department concluded that, 'in the period of the rollout private share investment would be the most expensive source

---

21 DBCDE, *Submission 10*, p. 10.

22 DBCDE, *Submission 10*, p. 10.

23 DBCDE, *Submission 10*, p. 10.

24 McKinsey & Company/KPMG, *Implementation Study*, May 2010, p. 41 – quoted by DBCDE, *Submission 10*, pp. 11-12.

of finance, achievable only through reduced returns on the public investment or major policy compromises'.<sup>25</sup>

- 6.26 Finally, in terms of the *level of control required by the investor*, the DBCDE explained that in making investments the private sector assumes risk 'which it would require mechanisms to mitigate'. Mechanisms here could include 'varying levels of control of management or in the absence of that, mechanisms that limit the flexibility of those that do have control'.<sup>26</sup>
- 6.27 The department concluded that, in the case of NBN Co, 'which has been established by government for the purpose of achieving important social and economic policy objectives', judgements taken in the course of the rollout 'in response to changes of circumstance or policy' could therefore be 'in conflict with the less complex commercial instincts of investors'.<sup>27</sup>

## Private Equity Funding Timeframe

- 6.28 In its submission, the DBCDE concluded that:

Consistent with the legislative framework for the ownership of NBN Co there are very limited options for bringing forward private investment in NBN Co.<sup>28</sup>

- 6.29 The committee notes the possibility of options, while 'very limited', for bringing forward private equity investment in funding the NBN and therefore remains interested in monitoring this issue. Further, the committee observes that the existing legislative framework and 'very limited options' for bringing forward private investment in NBN Co need not slow progress in gauging investor interest in the NBN or in exploring the cost/benefit of different capital structures for the NBN.
- 6.30 The committee also notes the DBCDE's broader definition of private 'equity' as also encompassing private 'borrowing':
- Typically equity is considered to be share capital in a company, which is consistent with the Macquarie Dictionary definition 'the interest of a shareholder of common stock in a company'. A broader definition is also provided by Macquarie 'those funds of a company which are raised by borrowing from proprietors and external sources'.<sup>29</sup>

---

25 DBCDE, *Submission 10*, p. 10.

26 DBCDE, *Submission 10*, p. 10.

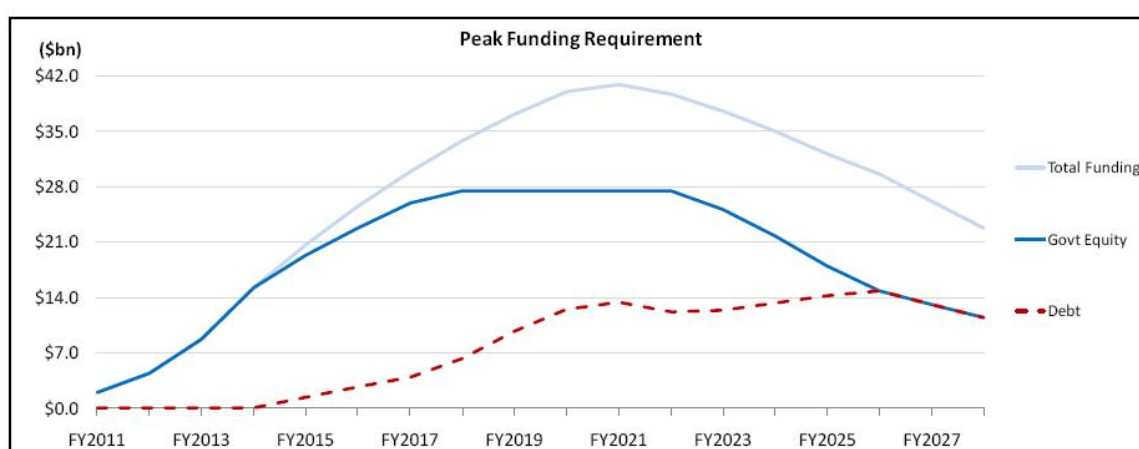
27 DBCDE, *Submission 10*, pp. 10-11.

28 DBCDE, *Submission 10*, p. 11.

29 DBCDE, *Submission 10*, p. 11.

- 6.31 As the department further clarified on this point, while the ‘introduction of any non-Commonwealth direct interest in the share capital of NBN Co would be inconsistent with the existing legislative provisions and social policy objectives ... borrowings [debt financing arrangements] on the other hand are not precluded by the legislative framework’.<sup>30</sup> This matter is further discussed below.
- 6.32 Figure 6.2 provides an outline of NBN Co’s funding profile in terms of debt and equity funding through to 2028.

Figure 6.2 NBN Co Funding Profile (debt and equity) to FY2028 (\$billion)



Source NBN Co, *Corporate Plan 2011-2013*, p. 141

## Debt Financing

- 6.33 The Government’s *Statement of Expectations*<sup>31</sup> specifies that ‘NBN Co should seek to raise debt capital at the earliest opportunity it is able without external support’.<sup>32</sup> The NBN Co *Corporate Plan 2011-13* assumes that maximum debt financing will start from 2015.<sup>33</sup> As the DBCDE noted:

NBN Co’s *Corporate Plan 2011-13* plans for the introduction of debt financing mid way through the rollout, that is commencing in 2015. This plan, which is supported by the independent analysis of Greenhill Caliburn and KPMG, is based on this timing being the earliest that the revenue generated by NBN Co would provide

30 DBCDE, *Submission 10*, p. 11.

31 Australian Government, *Statement of Expectations*, 20 December 2010 – the *Statement of Expectations* provides an outline of the Government’s policy implementation objectives for the NBN, as well as its response to the *Implementation Study*.

32 DBCDE, *Submission 10*, p. 11.

33 NBN Co, *Corporate Plan 2011-2013*, p. 141.

lenders with confidence that interest charges can be met and the borrowings repaid at the expiration of the term.<sup>34</sup>

- 6.34 With debt financing on the radar in 2015, the committee was interested to explore NBN Co's progress to date on debt financing arrangements. The Secretary of the DBCDE responded that:

...in debt financing, there are conditions on the kinds of bonds that are raised which will be of great interest and will therefore shift the profile required from particular financiers. So they will be thinking that through at the moment ... I guess those ultimately will be questions that the committee will be interested in, but my own view is that it is a little too early now to be able to even ask a market participant because that will be their first question: 'Well, what kind of bond raising are we talking about here?'.<sup>35</sup>

- 6.35 The committee was also interested to hear from Mr Quigley, CEO of NBN Co, that:

In the company, we have not had any discussions on debt financing yet.<sup>36</sup>

- 6.36 The committee notes that NBN Co's *Corporate Plan 2011-2013* refers to an 'estimate of \$13.4 billion of debt funding', over the period to June 2021.<sup>37</sup> The plan also states that, from 2023 onwards, this would provide 'a mechanism for repayments of equity over time'.<sup>38</sup>

- 6.37 The *Corporate Plan 2011-2013* also assumes that 'debt funding equivalent to 33% of total funding required over the period FY2011-FY2021 would be raised', noting that, 'if actual debt raised at the time was lower than projected, then Equity Funding by Government would need to be increased'.<sup>39</sup> In terms of the 'Achievability of debt funding', the *Corporate Plan 2011-2013* further states:

Critical to NBN Co's ability to raise external funding without explicit support by Government will be the opinions of debt providers on the Company's achievements, roll-out timeliness and connections uptake, which will form the key metrics of credit quality ...

---

34 DBCDE, *Submission 10*, p. 11.

35 Mr Harris, DBCDE, Transcript of Evidence, Sydney, 16 April 2012, p. 50.

36 Mr Mike Quigley, CEO, NBN Co, Transcript of Evidence, Sydney, 16 April 2012, p. 50.

37 NBN Co, *Corporate Plan 2011-2013*, p. 141.

38 NBN Co, *Corporate Plan 2011-2013*, p. 141.

39 NBN Co, *Corporate Plan 2011-2013*, p. 24.



Market capacity, and the risk appetite of debt investors, might limit the amount of debt that the Company can actually raise. This would require revising the funding plan at the time to assume a higher level of Government equity.

There is no assurance that this level of debt could be issued. The level and timing of debt will be the major financial risk that NBN Co will continuously assess.<sup>40</sup>

6.38 This raises a number of issues – in particular, it would appear to be critical for NBN Co to start considering its debt financing arrangements as soon as possible, given:

- the fast-approaching timeframe of 2015 for the commencement of debt financing
- that debt financing is projected to constitute 33 per cent of total NBN Co funding required over the period FY2011-FY2021<sup>41</sup>
- that if actual debt raised at the time is lower than projected, then equity funding by Government might need to be increased<sup>42</sup>
- that the ‘level and timing of debt’ has been identified as a ‘major financial risk that NBN Co will need to continuously assess’.<sup>43</sup>

6.39 At the time of drafting this report, NBN Co’s new corporate plan had not yet been publicly released. However, as noted in Chapter 2, on 16 April 2012, the NBN Co informed the committee that it would be revising the NBN rollout targets contained in its *Corporate Plan 2011-2013*. Targets would be revised and published through the release of a new corporate plan to the Government by the end of May 2012.<sup>44</sup>

6.40 The committee will therefore be interested if there are any revisions in the new corporate plan relating to debt financing. Any revisions to NBN Co’s rollout targets in the new corporate plan will need to be closely monitored as any delays in this regard may in turn push back the projected timeframe for debt financing arrangements, with possible implications for Government equity funding.

---

40 NBN Co, *Corporate Plan 2011-2013*, p. 142.

41 NBN Co, *Corporate Plan 2011-2013*, p. 24.

42 NBN Co, *Corporate Plan 2011-2013*, p. 24.

43 NBN Co, *Corporate Plan 2011-2013*, p. 142.

44 Mr Quigley, Transcript of Evidence, 16 April 2012, p. 47.

- 6.41 The committee will be interested to investigate NBN Co's progress in this area over the next reporting period, once the new corporate plan has been released.

## Concluding Comments

- 6.42 The committee remains interested in examining the points of entry for private investment in the NBN – both in the form of equity and debt funding – to ensure a maximum return on the Government's investment is secured on behalf of Australian taxpayers.
- 6.43 The committee concludes that, given the significance of debt financing arrangements to its future funding mix, NBN Co should progress consideration of this matter as a priority. Further, any revisions to NBN Co's rollout targets will need to be closely monitored as any delays in this regard may push back projected timeframes for debt financing arrangements and private equity engagement (in the form of a direct interest in the share capital of the NBN), with possible implications for Government equity funding.
- 6.44 The committee also notes that, while the existing legislative framework for the NBN suggests that there are 'very limited options for bringing forward private investment in NBN Co',<sup>45</sup> this need not slow progress now in exploring the cost/benefit of different capital structures for the NBN.
- 6.45 In addition, given that the opinions of debt providers on NBN Co's achievements, rollout timeliness and connections uptake will form the 'key metrics of credit quality' critical to its ability to raise external funding,<sup>46</sup> NBN Co will need to ensure comprehensive performance reporting documentation on these areas.
- 6.46 These matters will continue to be examined by the committee over the next reporting period.

---

### Recommendation 12

- 6.47 **While noting possible revisions in this area in NBN Co's next corporate plan, the committee recommends that NBN Co progress its consideration of debt financing arrangements as a priority.**

---

45 DBCDE, *Submission 10*, p. 11.

46 NBN Co, *Corporate Plan 2011-2013*, p. 142.

## Telstra Workforce Issues

### Background

In implementing structural reform of the telecommunications industry, the Government's NBN policy will have a significant impact on Telstra as the highly integrated and dominant industry incumbent.<sup>47</sup>

6.48 The Binding Definitive Agreements between NBN Co and Telstra form the basis of Telstra's participation in assisting with the rollout of the NBN.<sup>48</sup> In support of these agreements, the Government has committed to providing \$100 million to Telstra to assist it in the retraining and redeployment of Telstra employees affected by these reforms to the structure of the telecommunications industry.<sup>49</sup>

6.49 Against this background, the committee continues to be interested in Telstra workforce issues.

### First and Second Reports

6.50 The First Report signalled the committee's intention to examine workforce issues related to the rollout of the NBN. However, as a range of key agreements concerning the NBN were still being finalised by the various parties at the time of completion of the first reporting period, such as the NBN Co agreement with Telstra, the committee indicated that it would examine workforce issues over its second reporting period.<sup>50</sup>

6.51 The committee duly considered workforce related matters in its Second Report, focusing on the Telstra Retraining Funding Deed (RFD). The committee was particularly interested in the terms of the RFD.<sup>51</sup> However, the RFD had not yet come into force at the time of the second review<sup>52</sup> and therefore many of the issues that the committee wished to explore had to be carried over. It was concluded that 'more work need[ed] to be done in

---

47 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. 34.

48 NBN Co, 2011, *NBN Co and Telstra Sign Binding Definitive Agreements*, media release, 23 June.

49 Conroy S (Minister for Broadband, Communications and the Digital Economy) and Wong P (Minister for Finance and Deregulation), 2012, *Definitive agreements between NBN Co and Telstra come into force*, media release, 7 March.

50 JCNBN, *Review of the Rollout of the National Broadband Network: First Report*, August 2011, p. vi.

51 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. 49.

52 The RFD came into force when NBN Co's Binding Definitive Agreements with Telstra commenced on 7 March 2012, DBCDE, *Submission 10*, p. 4.

detail' on workforce related matters and that investigation of this matter would therefore be continued over the third reporting period.<sup>53</sup>

## Current Report

- 6.52 Following the Second Review, the committee was interested in more closely examining the following issues:
- the Telstra Retraining Funding Deed (RFD)
  - the Telstra Training Plan under the RFD
  - Telstra's workforce composition
  - consultation arrangements under the Telstra Stakeholder Management Plan
  - reporting requirements under the RFD
  - projected employment in terms of the NBN project.

## Telstra Retraining Funding Deed

- 6.53 The Binding Definitive Agreements between NBN Co and Telstra form the basis of Telstra's participation in assisting with the rollout of the NBN.<sup>54</sup> The agreements came into force on 7 March 2012.
- 6.54 In support of these agreements, the Government committed to provide \$100 million to Telstra under the Retraining Funding Deed (RFD) to assist it in the retraining and redeployment of Telstra employees affected by these reforms to the structure of the telecommunications industry.<sup>55</sup> The RFD is set to conclude in June 2019.<sup>56</sup> While the term of the RFD is for eight years, Telstra may request an extension of a further three years.<sup>57</sup>
- 6.55 Telstra also highlighted its commitment to ongoing training and development of its employees, outside of the RFD:

---

53 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. iv.

54 NBN Co, 2011, *NBN Co and Telstra Sign Binding Definitive Agreements*, media release, 23 June.

55 Conroy S (Minister for Broadband, Communications and the Digital Economy) and Wong P (Minister for Finance and Deregulation), 2012, *Definitive agreements between NBN Co and Telstra come into force*, media release, 7 March.

56 DBCDE, *Submission 3.2, Second Review of the JCNBN*, Answer to Question on Notice No. 9, p. 1.

57 DBCDE, *Submission 10*, p. 5.

It is important to note that, in terms of our investment in our people, the \$100 million, although substantial, only makes up a small proportion of the amount we will spend on training, learning and development over the NBN rollout period.<sup>58</sup>

- 6.56 The RFD between the Commonwealth and Telstra came into force when the Binding Definitive Agreements commenced in March 2012.<sup>59</sup> The RFD sets out the terms by which the Government will provide this funding to Telstra to retrain certain staff over an eight-year period. The objectives of the deed are:
- To support the availability of an appropriately trained workforce for the NBN; and
  - For Telstra to establish a retraining arrangement for its staff who may otherwise have faced a redundancy as a consequence of the rollout of the NBN, thereby creating greater value for Telstra as part of the overall Definitive Agreements package than the Commonwealth's cash contribution.<sup>60</sup>
- 6.57 The RFD sets out how Telstra will identify employees eligible for retraining in NBN related technical, process and system activities; the scope of training courses to be made available; the standards and quality that must be met; and the timing of training.
- 6.58 The deed operates by identifying an Automatically Eligible Workgroup (AEW) and other employees who may be determined to be eligible. The AEW group has priority for accessing the retraining and includes the Telstra:
- copper and hybrid fibre coaxial (HFC) based field workforce which undertakes installation and maintenance and construction and maintenance activity on Telstra's Customer Access Network;
  - direct field support workforce which conducts copper/HFC based field workforce support, including workforce management, workforce and resource planning, and construction program management;
  - support of copper/HFC operations workforce which provides design of products, management of damages, network integrity, plant assigning, customer network improvements and contract management; and

---

58 Dr Tony Warren, Group Managing Director, Corporate Affairs, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 33. Telstra advised the committee that it has a training budget of \$46 million per annum, Telstra, *Submission 14*, Answer to Question on Notice No. 4, p. 2.

59 DBCDE, *Submission 10*, p. 4.

60 DBCDE, *Submission 10*, p. 4.

- wholesale copper service workforce which provides the interface between retail service providers and Telstra in relation to copper services.<sup>61</sup>

6.59 The remaining eligible employees are 'those employees or a class of employees who may face redundancy unless retrained for redeployment as a consequence of the decommissioning of the copper network and the HFC network broadband capability being deactivated'.<sup>62</sup>

6.60 Telstra advised that the average age of the group within Telstra Operations who are automatically eligible for retraining is 45 – consistent with the average age of the broader Telstra Operations workforce, which is 44.<sup>63</sup>

6.61 Telstra provided useful background on the history of the agreement and the workforce implications for Telstra of the rollout of the NBN:

When Telstra commenced negotiations with the government and NBN Co. on our potential involvement in the NBN, we were very conscious that the structural changes being imposed on the telco sector, and on us in particular, would have significant implications for our business and our workforce. This concern was one of the reasons why we sought the inclusion of the retraining funding deed in the definitive agreements. Government decisions around the NBN will have a direct long-term impact on the way Telstra operates and will have practical implications for our workforce.<sup>64</sup>

6.62 Telstra also pointed to other, non-NBN-related, potential impacts on its workforce composition, including:

...the global changes to the telco sector, for example, the movement from simple connectivity to the provision of more complex network applications and services; the changing usage patterns of our customers, for example, the greater use of data versus voice; the associated convergence of voice and data networks; the increasing number of our customers choosing to manage their interactions with us and with other carriers online; and the activities underway within Telstra to simplify our business processes to drive out complexity and to improve customer service.<sup>65</sup>

---

61 DBCDE, *Submission 10*, pp. 4-5.

62 DBCDE, *Submission 10*, p. 5.

63 Telstra, *Submission 14*, Answer to Question on Notice No. 7, p. 4.

64 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 32.

65 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 33.

6.63 The number of employees in the AEW group as at 1 March 2012 was 6255 employees.<sup>66</sup> As at 31 December 2012, Telstra had a total of 28 853 employees (excluding domestic controlled entities, offshore controlled entities, and agency and contract labour) – see Table 6.1.

Table 6.1 Telstra Workforce Composition (as at 31 December 2012)

	Full time equivalent employees
<b>(1)Telstra-paid employees<sup>a</sup></b>	<b>28 853</b>
Domestic controlled entities	4 089
<b>(2)Domestic employees: (1) + Domestic controlled entities</b>	<b>32 942</b>
Offshore controlled entities	4 219
<b>(3)Total employees: (2) + Offshore controlled entities</b>	<b>37 161</b>
Agency + Contract labour	4 711
<b>(4)Total workforce<sup>b</sup>: (3) + Agency + Contract labour</b>	<b>41 872</b>

a Of the Telstra paid employees (1), 15,257 FTE are in Operations, 8,625 FTE are in Customer Sales and Service and the remaining 4,971 FTE are in Corporate Areas (including Marketing and Products, Finance, HR, Business Support & International)

b Total workforce includes those employees on long-term extended leave

Source DBCDE, *Submission 10*, p. 6

6.64 The committee was interested in the total number of Telstra employees who might potentially fall into the AEW group over the life of the RFD – whether the size of this group might change, depending on how much work Telstra gained over time from the NBN – and also the total number of other Telstra employees who could potentially be determined as eligible for retraining over the life of the RFD. Telstra explained that:

...it is a pretty stable pool. I do not think we can extend it terribly much. Obviously if someone else is affected we would bring them in, but we did think pretty long and hard about who the affected employees would be and we are pretty confident that, except for maybe a handful here and a handful there, in broad numbers it is a pretty stable pool. My expectation is that that is a pretty stable pool.<sup>67</sup>

6.65 The committee noted that Telstra employees currently involved in providing access duct work for the NBN were not apparently eligible under the RFD:

Obviously we have a very big contract with NBN to do duct work and so, to the extent that there are people there, they are not

66 DBCDE, *Submission 10*, p. 5.

67 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 40.

eligible. We will be doing quite a bit of passive infrastructure work for NBN and those people are not in the eligible work pool.<sup>68</sup>

### Telstra Training Plan

- 6.66 The RFD requires that a Training Plan be developed by Telstra and approved by the DBCDE. The Training Plan is therefore a significant component of the RFD. The initial Training Plan covers a three-year period, with subsequent plans to be lodged six months before the expiry of the previous plan.<sup>69</sup>
- 6.67 The scope of the Training Plan is to identify the training needs, courses to be developed, approach to course development, training methodology and targets for retraining. Telstra will 'give priority to retraining in NBN-related technical, process and system activities'.<sup>70</sup> Under the terms of the RFD, the Training Plan must use 70 per cent of the funds for accredited training, to be delivered by a Registered Training Organisation (RTO). An RTO must be registered with a state or territory training authority of the National Audit and Registration Agency. This is regarded as an important quality measure under the RFD:
- Telstra staff will be building on their skills and experience with accredited training that can be used towards the achievement of nationally recognised qualifications.<sup>71</sup>
- 6.68 The committee was interested in how these RTOs will be identified under the RFD. It was explained that:

Telstra is an Enterprise Registered Training Organisation (RTO), which is an organisation that is registered as an RTO but the principal business of the enterprise is not training and development, yet its primary target learning population are its employees. As such, Telstra will be responsible for the accreditation for a large proportion of the training to be delivered. Actions are in place to ensure that Telstra will have subject matter experts with the requisite training qualifications and industry competency, up skilled to deliver the required training and assess the competency of Telstra employees.

Where external training is required, Telstra will identify suitable RTOs via standard procurement practices.<sup>72</sup>

---

68 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 41.

69 DBCDE, *Submission 10*, p. 5.

70 DBCDE, *Submission 10*, p. 5.

71 DBCDE, *Submission 10*, p. 5.



6.69 The committee also queried the geographic location of this training delivery, given that eligible Telstra employees are located in many different parts of the country. Telstra responded that it has:

...a long history of delivering training to all geographic locations nationally. This training is planned and delivered as part of the "business as usual" training plan. Resources for NBN retraining delivery will be planned on an annual and quarterly basis and factored into the Training Plan to cover the wide geographic area where Telstra employees are located. It is expected that some employees will be required to travel to training in different locations.<sup>73</sup>

6.70 The initial draft Training Plan must be submitted to the DBCDE by 30 April 2012 for approval. Telstra confirmed that it was 'in the process of consulting with employees, with unions and with the government on the detail of the first training plan under the deed' and 'currently on track to lodge the plan with the government by 30 April this year'.<sup>74</sup>

6.71 While the RFD came into force in March 2012, the committee understands that these retraining arrangements are therefore not effectively operational for Telstra staff until the Training Plan is approved by the DBCDE:

The Retraining Funding Deed came into effect on 7 March 2012. It requires a draft Training Plan be developed and submitted to the Department by 30 April 2012 for approval and for prior and ongoing consultation with unions and the Department on retraining arrangements.

Until Telstra receives approval of the Training Plan from the Department, there is no retraining curriculum to be implemented under the terms of the Retraining Funding Deed.<sup>75</sup>

6.72 This raised a number of issues for the committee. Firstly, as the Training Plan under the RFD was not scheduled to be provided to the DBCDE for approval until 30 April 2012, by which time the committee had concluded its public hearings for the third reporting period, the committee was unable to further investigate the effectiveness of the RFD and Training Plan.

---

72 Telstra, *Submission 14*, Answer to Question on Notice No. 6, p. 3.

73 Telstra, *Submission 14*, Answer to Question on Notice No. 6, p. 3.

74 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 33.

75 Telstra, *Submission 14*, Answer to Question on Notice No. 6, p. 1.

6.73 Secondly, the committee was interested in the gap between the RFD coming into force and it actually becoming operational. In particular, the committee was concerned about what might happen to any Telstra employees affected in the interim who may have been deemed eligible for retraining or redeployment under the RFD, if it had been operational. This could mean that opportunities under the RFD were being missed and retraining opportunities were not being pursued.

6.74 Telstra responded that:

...the impact of the NBN on our workforce at this stage is not significant because we still have a large bulk of business as usual on the copper network and all the work that still goes on with our IP network and the mobile network and the like. We are really looking at getting our workforce arrangements in place to deal with the NBN as we know more about it. We still do not know a lot about some of the network construction arrangements, who is going to do what, when and where.<sup>76</sup>

6.75 Telstra further explained that:

As the draft Training Plan is not scheduled to be provided to the DBCDE for consideration until 30 April 2012, and employees are not being affected as yet by the decommissioning of the copper network or the deactivation of the HFC network as a consequence of the rollout of the NBN, there is no retraining curriculum to be implemented under the terms of the Retraining Funding Deed. However, Telstra will consider the circumstances of individual employees, including the potential for redeployment within Telstra's business and to undergo existing Telstra retraining.<sup>77</sup>

6.76 The committee therefore understands that, over this interim period, Telstra will consider the circumstances of individual employees affected by these changes, on a 'case by case basis'.<sup>78</sup> Telstra further emphasised that:

We have a pretty strong preference for retraining and redeployment rather than redundancy, for obvious reasons. That is the case whether or not we had the retraining fund in place. Obviously that helps, because there is a huge body of retraining that has to happen. But at the moment – and six months ago – we

---

76 Mr James Shaw, Director, Government Relations, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 35.

77 Telstra, *Submission 14*, Answer to Question on Notice No. 3, p. 2.

78 Telstra, *Submission 14*, Answer to Question on Notice No. 1, p. 1.

are trying as best we can to identify if there are other roles within the company to redeploy those people as they stand. So, as you would know, there are some growth areas and some declining areas anyway, regardless of the NBN. We have been trying to cycle people through and move them out of declining areas and retrain them into other areas ... If a person had a retraining or redeployment option now, it is not like we would wait for the deed to get up and running before we did that; we would be trying very hard now to get them across.<sup>79</sup>

- 6.77 The committee was also concerned that there might be some Telstra employees affected by redundancies currently taking place as a result of job offshoring who could have been eligible to be retrained, if the RFD had been operational. The committee was interested in how that group of people might be included in the short term. Telstra responded that:

On March 26, 2012, employees working within the Switch Data Network function were notified that three full-time positions in that area would be made redundant.

Given the draft Training Plan is not yet approved, and that these employees were not impacted by the decommissioning of the copper network or the deactivation of the HFC network as a consequence of the rollout of the National Broadband Network (NBN), Telstra considered the circumstances of these three employees on a case by case basis.<sup>80</sup>

- 6.78 Telstra further commented, with regard to work within the Network Applications and Services business 'where 255 roles were proposed to be made redundant over a three year period' (as announced in early December 2011), that:

...these employees do not have the option of training under the RFD given the draft Training Plan has not been approved by the Department. However, other opportunities are being considered for these employees. This includes applying for fifty newly created or vacant jobs within the NA&S group, where affected employees are given preference. Additional redeployment opportunities within Telstra are also being sought and some employees have already transitioned to these new opportunities.<sup>81</sup>

---

79 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, pp 35-36.

80 Telstra, *Submission 14*, Answer to Question on Notice No. 1, p. 1.

81 Telstra, *Submission 14*, Answer to Question on Notice No. 4, p. 2.

6.79 A related issue of interest to the committee was the amount of contracted work Telstra had obtained from NBN Co, as this obviously had implications for Telstra's workforce. Telstra noted that:

Apart from an early trial site in Brunswick, no. Telstra does not have any design construction work from NBN at this stage ... Clearly, commercial discussions between us and NBN have to proceed before that happens, but we are very keen to get that work for obvious reasons.<sup>82</sup>

6.80 Telstra further commented that:

As we migrate customers to the NBN and decommission our copper access network, the network maintenance task that we are currently doing will diminish with consequences, unfortunately, for our workforce. We have no certainty of obtaining a construction installation or maintenance contract with NBN Co. and this also has implications for our workforce. However, we continue to seek such work from NBN Co. and believe we have much to offer the project from a design, construction or maintenance perspective.<sup>83</sup>

## Job Offshoring

6.81 In the second review period, the committee sought information concerning a number of Telstra employees who had apparently had their jobs moved offshore.<sup>84</sup> As part of this third review, Telstra advised the committee, through the department, that:

Telstra is committed to recruiting and retaining the best talent and is one of Australia's largest employers. Telstra does not have any policy to recruit overseas workers. However, Telstra continually reviews its business to determine how best it can serve its customers. This means that we may work with other companies in the telecommunications industry to leverage their expertise while we focus more on our core business. From time to time this means that we restructure the business and this can result in roles becoming redundant.

---

82 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, pp. 36-37.

83 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 32.

84 DBCDE, *Submission 3.5*, Second Review of the JCNBN, Answer to Question on Notice No. 5, p. 5.

Where roles have been made redundant as a result of a restructure, significant effort is made to reassign or redeploy affected employees to suitable roles across Telstra.<sup>85</sup>

- 6.82 The committee continues to monitor trends in this area, particularly given that the RFD will provide a mechanism to assist in the retraining and redeployment of Telstra employees affected by the NBN rollout.

## Consultation

- 6.83 An important aspect of the Telstra RFD is consultation with employees and unions. Telstra has prepared a Stakeholder Management Plan that identifies employees and unions as key stakeholders. Telstra will meet quarterly with unions to discuss retraining.<sup>86</sup> A representative from the department will also attend these meetings as an observer. The committee understands that consultation meetings with the unions have already occurred – on 4 November 2011 and 19 March 2012.<sup>87</sup>

## Reporting Requirements under the Retraining Funding Deed

- 6.84 Under the RFD, Telstra must maintain full and accurate accounts and records of the conduct of the retraining, the use of funds, and progress against the training targets and Training Plan. Telstra will provide an annual budget and provide an audited annual financial report.<sup>88</sup> Telstra must also provide six-monthly reports to the DBCDE on progress against the Training Plan, and a more detailed annual report on progress against the Training Plan.<sup>89</sup>
- 6.85 In terms of accountability for the oversight and implementation of the RFD, Telstra explained that the Human Resources department within Telstra implements the RFD and that the NBN Transition Team within Telstra is responsible for its oversight.<sup>90</sup>

## National Broadband Network Employment Projections

- 6.86 The committee was interested in the level and value of employment to be created through the building and operation of the NBN, particularly in the

---

85 DBCDE, *Submission 10*, p. 6.

86 DBCDE, *Submission 10*, p. 5.

87 DBCDE, *Submission 10*, p. 5.

88 DBCDE, *Submission 10*, p. 5.

89 JCNBN, *Review of the Rollout of the National Broadband Network: Second Report*, November 2011, p. 49.

90 Telstra, *Submission 14*, Answer to Question on Notice No. 5, p. 3.

context of the Telstra workforce retraining arrangements under the RFD. This employment includes direct NBN Co employment and NBN Co's purchase of inputs for the rollout, as well as related companies and industries commencing to deliver applications and services over the NBN infrastructure and the flow-on effects to the businesses with which these firms interact.

- 6.87 Given that the purpose of the RFD is to assist in the retraining and redeployment of Telstra employees, to prepare them to work on NBN related activities, forward projections concerning the scale and composition of this employment market are of significance.
- 6.88 Initial estimates prepared by the Australian Government in developing the NBN policy indicated that the NBN would 'support up to 25 000 local jobs every year, on average, over the life of the project, with up to 37 000 jobs at its peak'.<sup>91</sup> These figures include jobs created in related sectors that will support or deliver services over the NBN.
- 6.89 The committee understands that NBN Co has since established a workforce development group, which has undertaken an assessment of the tasks involved in the rollout, the skills required and the corresponding demand and supply for employment during the rollout construction.<sup>92</sup> The DBCDE submission noted that NBN Co has forecast direct employment demand for total employment in the construction phase of 16 000 to 18 000 jobs at peak of construction, with five key roles constituting some 80 per cent of forecast workforce demand:
- Labourer (5500)
  - Earthmoving plant operator (2300)
  - Road traffic controller (900)
  - Cabler (3000)
  - Telecommunications lineworker (1100)<sup>93</sup>
- 6.90 An important aspect of NBN Co's job requirements is that the rollout of the NBN is dispersed across Australia, providing opportunities for local employment, particularly during the construction phases. The DBCDE submission further notes that NBN Co's analysis for the construction of the NBN 'has found there are enough people in the industry to meet the

---

91 DBCDE, *Submission 10*, p. 7.

92 DBCDE, *Submission 10*, p. 7.

93 DBCDE, *Submission 10*, p. 7.

skills requirements for the construction of the network' so that this activity should not contribute to skills shortages.<sup>94</sup>

- 6.91 In terms of its direct workforce, NBN Co had 1496 employees as at 26 March 2012, and the committee understands that NBN Co is planning to employ up to 2800 employees during the peak of the rollout.<sup>95</sup> Table 6.2 provides details of NBN Co's workforce composition as at December 2011.

Table 6.2 NBN Co Workforce Composition

<b>NBN Co headcount</b>	<b>December 2011 (actual)</b>
Total operations staff	1 054
Total selling, general and administrative staff	301
Total headcount (including contractors)	1 355 <sup>a</sup>

a This comprised 1,317 employees, 19 contractors and 19 labour hires. This total is an increase of 449 from 30 June 2011 and 774 from 31 December 2010.

Source *Shareholder Ministers, 'Performance Report to 31 December 2011', Submission 12, p. 16.*

- 6.92 During 2011, NBN Co awarded a range of contracts totalling some \$4 billion, the majority of which were for Australian based manufacturing and services, leading to direct new employment of approximately 700 to 1,000 new jobs.<sup>96</sup> As the DBCDE noted, while procurement policy is a commercial matter the company, NBN Co is expected to 'actively promote opportunities, where possible, for local enterprises', including seeking 'local content and sourcing arrangements in its major contracts'.<sup>97</sup>

## Concluding Comments

- 6.93 The committee notes Telstra's statement that it 'takes its responsibilities to properly support its employees very seriously. Negotiating the retraining funding deed, our efforts to redeploy staff and our generous redundancy provisions are, we believe, examples of this seriousness.'<sup>98</sup>
- 6.94 As the Telstra Training Plan under the RFD was not scheduled to be provided to the DBCDE for approval until 30 April 2012,<sup>99</sup> by which time the committee had concluded its public hearings for the third reporting period, the committee was unable to fully explore the effectiveness of the RFD and Training Plan. The committee will therefore investigate this

94 DBCDE, *Submission 10*, p. 7.

95 DBCDE, *Submission 10*, p. 7.

96 DBCDE, *Submission 10*, p. 7.

97 DBCDE, *Submission 10*, p. 8.

98 Dr Warren, Telstra, Transcript of Evidence, Sydney, 16 April 2012, p. 33.

99 Telstra, *Submission 14*, Answer to Question on Notice No. 3, p. 2.

matter in more detail over the next review period, including any impacts in terms of the gap between the RFD coming into force and it actually becoming operational.

- 6.95 Over future reporting periods, the committee will be interested to monitor progress under the Telstra RFD in supporting the availability of an appropriately trained workforce for the NBN and the numbers of Telstra employees retrained/redeployed and successfully transitioned over into the NBN sector who may otherwise have faced a redundancy as a consequence of the rollout of the NBN. Any revisions to NBN Co's rollout targets will also need to be monitored as this may affect RFD arrangements and impact on the retraining and redeployment of Telstra employees.
- 6.96 The committee will also continue to monitor the composition of the AEW – whether the size of the group might change, depending on how much work Telstra gained over time from the NBN – and whether other Telstra employees might also be eligible under the RFD. The committee will be interested in the reporting documentation produced by Telstra under the RFD. In this regard, the committee notes that it would be useful to establish some form of public reporting on progress under the RFD, if this is not already envisaged.
- 6.97 To ensure that the Australian workforce, more generally, has the skills-set to be able to implement and maintain the NBN into the future, the committee finds that NBN Co may need to better communicate major areas of emerging training need and workforce demand in this regard.
- 6.98 In its First Report, the committee recommended that the Minister for Broadband, Communications and the Digital Economy publish a detailed statement outlining the job benefits of the NBN rollout.<sup>100</sup> In its response to the report, the Government provided such a statement, entitled 'Job benefits'.<sup>101</sup> Given the significant level and value of employment to be created through the building and operation of the NBN and in the context of the Government's support for the retraining and redeployment of Telstra employees affected by these telecommunications reforms, it would be useful for the Government to publish a detailed statement on this matter on an annual basis.

---

100 JCNBN, *Review of the Rollout of the National Broadband Network: First Report*, August 2011, p. xviii.

101 Australian Government, *Response to the Committee's First Report of 31 August 2011*, February 2012, pp 19-21.



**Recommendation 13**

- 6.99 The committee recommends that the Department of Broadband, Communications and the Digital Economy publicly disseminate a reporting document on annual progress under the Telstra Retraining Funding Deed.

**Recommendation 14**

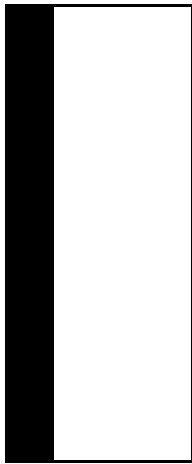
- 6.100 The committee recommends that NBN Co publicly communicate major areas of emerging training need and workforce demand with regard to the rollout of the National Broadband Network, to assist with future Australian workforce planning in this sector.

**Recommendation 15**

- 6.101 The committee recommends that the Minister for Broadband, Communications and the Digital Economy publish, on an annual basis, a detailed statement outlining the direct and indirect employment benefits of the National Broadband Network (NBN) rollout, including in terms of local/regional employment and major areas of emerging NBN workforce demand.

**Robert Oakeshott MP**  
**Chair**

**19 June 2012**



## Dissenting Report by Coalition Members and Senators

### **NBN's Special Access Undertaking and Wholesale Broadband Agreements**

We note the withdrawal of NBN Co's Special Access Undertaking (SAU) to the ACCC, and the lodgement of a new SAU, is a unique opportunity for NBN Co to reconsider the level of its planned investment and hence reduce the 'flexibility' it needs to recover invested capital by increasing imposts on end users.

Business journalist John Durie noted in an article that the aggressive SAU terms sought by the NBN are virtually without precedent: One member comments the amount of discretion being sought by NBN boss Mike Quigley would make even the Telstra of old blush."<sup>1</sup>

There are at least three major problems with the NBN Co's SAU:

- The price constraints are not binding, and increased data volume usage will lead to significant price increases. The NBN has also sought to exempt many of its product offerings from the undertaking.
- The NBN has made no service level assurances to RSPs.
- There is no scope for ACCC or any other external scrutiny of NBN Co's planned network to determine whether it is prudent or 'gold plating'.

The NBN Co is expected to earn a return of 7 per cent on the amount invested in its network. Yet the Government prescribed the most expensive possible technology for 93 per cent of the network and never permitted NBN Co any scope

---

1 <http://www.theaustralian.com.au/business/opinion/nbns-access-plan-is-set-to-be-rejected-by-regulator/story-e6frg9io-1226401686397>

to reduce its capital spending to more prudent levels where this was possible (such as by using a fibre-to-the-node architecture where this was an economically rational choice).

## Recommendations

To avoid confusion with the wording of Recommendation 5 of the main report (3.91), the minority proposes the recommendation state: “The NBN Co Wholesale Broadband Agreements include service level assurances that allow RSPs to meet their statutory customer service guarantees.

The minority recommends that as part of ongoing consultation with the ACCC, the NBN Co’s instructions from Government are expanded to allow it to explore ways to invest its capital more prudently and reduce the overall cost of the network.

The minority recommends the Government instruct NBN Co to submit plans for alternative network architectures with estimates of cost of these per premise to the Productivity Commission, to form the basis of a rigorous cost-benefit analysis.

## Migration to the NBN

We note migration to the NBN has been weak, reflecting the fact that few applications exist to take advantage of 100mbps bandwidth and residential households are mostly unwilling to pay any significant premium for increased bandwidth.

In Tasmania, for instance, the NBN added only 100 customers during the past year and take-up rate is still only 18 per cent.<sup>2</sup>

The NBN Co has created significant financial incentives to encourage migration from existing networks to the NBN. The Government instructed the NBN Co to set initial prices to be comparable to those in the market at the moment for ADSL2+ products. Synergies Consulting notes this increases the risk profile of the NBN business case:

“The risks of having to price to ‘meet the market’ in accordance with government expectations, are best managed by providing NBN Co with a degree of pricing flexibility.” (Available online [here](#), p.9)

The Government has also announced the Telecommunications Universal Service Management Agency will “provide financial assistance so that any reasonable

---

2 <http://www.theaustralian.com.au/business/in-depth/take-up-rate-claims-misleading/story-e6frgaif-1226383973431>

connection costs” are covered for RSPs to switch voice-only customers to the NBN if these customers did not migrate in the first 12 months of NBN availability.

This will create a significant financial burden for TUSMA, given for instance that Telstra charges \$179 for in-home support when switching to the NBN:<sup>3</sup>

“Telstra Plus provides you with expert help on a wide range of services not available through our standard support services, such as networking your T-Box®, T-Hub® to other non-Telstra devices – such as your Mac, PC, tablet, printer or game console. You can choose over-the-phone support from \$99 or in-home support from \$179.”

In the 2011-12 financial year, the Department spent \$20 million in advertising to ‘assist migration’ to the NBN. This amount appears excessive and has so far produced underwhelming results, given take-up in places such as Tasmania.

## Recommendations

The minority recommends that the Government promptly announces a per-premise price on payments to RSPs to smooth transition to the NBN. It should explain how much this is likely to cost TUSMA and how much of its annual budget this will constitute.

The minority recommends the Department explore other ways to encourage the transition to superfast broadband. This includes less disruptive network architectures to end users (such as a fibre-to-the-node architecture).

Given ABS figures show the group least likely to have superfast broadband are the lowest income brackets, the minority recommends the Department study the extent to which infrastructure-based competition encourages price competition by wholesale providers, and sets an anchor for entry-level pricing. The Department should explore policies to encourage continued competition of this form.

The Department review the efficiency of its spending campaign in promoting the NBN to assess its efficiency.

## Rollout of the NBN

The minority notes the desirability of providing affordable broadband upgrades to all Australians as soon as practicable, particularly to households in areas with poor broadband access.

---

3 <http://www.telstra.com.au/bigpond-internet/national-broadband-network/faqs/>

Under the upgrades promised by the NBN during the next 12 months, 60 per cent of suburbs are in Labor electorates compared to under 35 per cent in Coalition electorates. In NSW and Victoria, Labor suburbs will account for 80 per cent of the rollout.<sup>4</sup>

The minority notes that the NBN Co has not sought to investigate which suburbs are currently underserved nor is it attempting to upgrade such suburbs as a matter of priority.

The minority notes a detailed rollout schedule, uploaded on the NBN Co website on June 15,<sup>5</sup> which includes 'The date that NBN Co expects to be ready to connect end users from Access Seekers within this Rollout Region.'

The schedule appears to show the NBN fibre will pass 236,900 'brownfields' households by June 2013 and 20,995 'greenfields' households. This is a total of 257,895 premises in addition to the approximately 20,000 premises already passed by fibre.

This contrasts with the forecast in the Corporate Plan released in December 2010, which forecast the fibre network would pass 950,000 brownfields households by June 2013 and 319,000 greenfields households by June 2013. Therefore the NBN fibre rollout over its first three financial years will achieve only 24 per cent of its publicly stated brownfield target and 7 per cent of its greenfield target.

Perhaps the most concerning area of delay is in the area of greenfields. As of January 1, 2011, the NBN Co had only 110 active services in greenfields areas. More recently, the NBN Co announced that it will not renew its relationship with subcontractor Fujitsu, pointing to significant delays in this area.<sup>6</sup>

## Recommendations

The minority recommends the Government investigate ways of speeding up the rollout by using existing infrastructure where possible and deploying different architectures (such as fibre-to-the-node) where appropriate. The Department should undertake a study of cost and timing of deployment in comparable economies of various architectures which should inform a rigorous cost-benefit analysis of options for broadband upgrades.

---

4 <http://www.theaustralian.com.au/business/in-depth/nbn-pre-poll-rollout-tilted-to-labor-seats/story-e6frgaif-1226383981350>

5 <http://www.nbnco.com.au/getting-connected/service-providers/network-rollout.html>

6 <http://www.crn.com.au/News/305647,nbn-co-cuts-ties-with-fujitsu-over-greenfield-delays.aspx>

Given the NBN Co is experiencing a lull in activity in greenfields fibre installation, the Department should revisit policy proposals to promote competition in greenfields areas and encourage private providers to invest in fibre networks.

## **Advertising on the NBN**

The Department has provided \$20 million in the current financial year to “improve public understanding, address misconceptions and provide updated information about the National Broadband Network” (Budget Paper 2, p.95).

The NBN Co revealed in Senate Estimates that its own total advertising spend in 2011-12 was \$8.12million including \$3.659 million during a four week period for the three-year rollout announcement.

Given that the NBN Co revealed in Senate estimates, it has less than 4,000 customers on its fibre network, these figures appear excessive.

## **Recommendations**

The Government and NBN Co conduct a review of its advertising spending for effectiveness and measure this against uptake and other relevant metrics. Expenditure should be reduced unless it can be demonstrated as providing value for money.

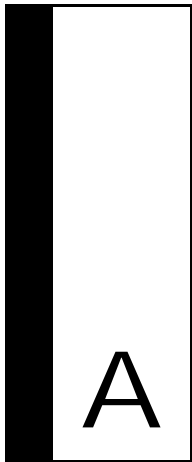
The NBN Co should refrain from advertising Stage One of the fibre rollout in suburbs and regional areas which have not been included in the Stage One schedule.

**Hon Malcolm Turnbull MP**  
**Member for Wentworth**

on behalf of the Coalition Members of the Joint Committee  
on the National Broadband Network







## Appendix A – Submissions and Exhibits

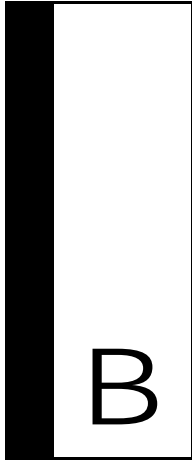
### Submissions

- 1 Mr Trevor Barrell
- 2 Country Women's Association of New South Wales – Sturt Group
- 3 Department of Broadband, Communications and the Digital Economy
- 3.1 Department of Broadband, Communications and the Digital Economy  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 3.2 Department of Broadband, Communications and the Digital Economy
- 3.3 Department of Broadband, Communications and the Digital Economy  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 4 Shareholder Ministers (Minister for Broadband, Communications and the Digital Economy and the Minister for Finance and Deregulation)
- 5 Networked Infrastructure National Architecture Pty Ltd
- 6 Berrigan Shire (New South Wales)
- 7 Redland City Council (Queensland)
- 8 Regional Development Australia – Northern Inland New South Wales
- 9 Australian Industry Group
- 10 Department of Broadband, Communications and the Digital Economy  
*(Private Equity and Telstra Workforce Issues)*
- 11 Australian Communications Consumer Action Network
- 11.1 Australian Communications Consumer Action Network  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*

- 12 Shareholder Ministers (Minister for Broadband, Communications and the Digital Economy and the Minister for Finance and Deregulation)  
*(Six Monthly NBN Rollout Report)*
- 13 Mr Kevin Morgan
- 14 Telstra Corporation  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 15 NBN Co Limited  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 15.1 NBN Co Limited  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 15.2 NBN Co Limited  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*
- 16 Department of Finance and Deregulation  
*(Answers to questions taken on notice at the 16 April 2012 public hearing)*

## Exhibits

- 1 Ms Janelle Reimann, Principal, Willunga High School  
Overview of 'ICT Presentation' dated 4 November 2011 and newspaper article - Schriever J, 'Schoolgirl sex prank sparks cyber warning', *The Adelaide Advertiser*, 26 April 2012, pp 1 and 6.
- 2 Department of Broadband, Communications and the Digital Economy  
Gregg M, Wilson J, *Willunga Connects: A baseline study of pre-NBN Willunga*, Department of Further Education, Employment, Science and Technology, Government of South Australia, November 2011.



## Appendix B – Hearings and Witnesses

Monday, 16 April 2012 - Sydney

### **Australian Competition and Consumer Commission**

Mr Ed Willett, Commissioner and Chair, Communications Committee

Mr Richard Home, General Manager, NBN Engagement and Group Coordination

Mr Sean Riordan, Acting Group General Manager, Communications Group

### **Australian Communications Consumer Action Network**

Ms Teresa Corbin, Chief Executive Officer

Mr Jonathan Gadir, Senior Policy Adviser

### **Australian Retailers Association**

Mr Heath Michael, Director, Policy

### **Berrigan Shire Council**

Mr Matthew Hansen, Director, Corporate Services

### **Department of Broadband, Communications and the Digital Economy**

Mr Peter Harris, Secretary

Mr Daryl Quinlivan, Deputy Secretary

Mr Mark Heazlett, A/g First Assistant Secretary, NBN Implementation Division

### **Department of Finance and Deregulation**

Ms Stacie Hall, A/g First Assistant Secretary, Government Business, Special Claims and Land Policy

Mr Stephen Sorbello, Director, NBN Policy and Shareholder Branch

**NBN Co Limited**

Mr Mike Quigley, Chief Executive Officer

Mr Kieren Cooney, Chief Communications Officer

**Regional Development Australia - Northern Inland NSW**

Mr Nathan Axelsson, Executive Officer

Mr Alun Davies, NBN Coordinator

**Telstra Corporation**

Mr James Shaw, Director, Government Relations

Dr Tony Warren, Group Managing Director, Corporate Affairs

**Vodafone Hutchison Australia**

Mr Klaas Raaijmakers, Head of Broadband Strategy

Mr Matthew Lobb, General Manager, Industry Strategy and Public Policy

**Monday, 30 April 2012 – Willunga, South Australia****City Council of Onkaparinga**

Mr Mark Dowd, Chief Executive Officer

Mr Brian Hales, Economic Development Adviser

**Office and Image Services**

Mrs Lesley Bakker, Proprietor

**Tatachilla Lutheran College**

Mr Paul Andrejic, Business Manager

**Willunga Business and Tourism Association**

Mr Thomas Laing, Secretary