2

Performance Reporting and Regulatory Issues

Background

- 2.1 The Shareholder Ministers' Fourth Performance Report (the performance report) includes information about the progress of the National Broadband Network (NBN) rollout covering the six month period from 1 July to 31 December 2012, in addition to developments or post-closing events covering the period from 1 January to 22 March 2013. More recent developments relating to regulatory issues are also included.
- 2.2 The Performance Report includes:
 - A summary of the key milestones met by NBN Co Limited (NBN Co) in the reporting period
 - Six monthly and annual financial statements for the period ended 30 June 2012, and
 - 'Measurement against' Key Performance Indicators (KPIs) for the NBN Co for the six month period ended 31 December 2012.¹

NBN Rollout Progress Over the Reporting Period

2.3 The key statistical results for the NBN rollout in the reporting period are listed in Table 2.1. Results have not been included with Corporate Plan targets as targets are provided for the end of financial year only and not for six monthly results.

Table 2.1 Key Cumulative Current Half Year Results for the National Broadband Network Rollout ended on 30 June and 31 December 2012

Cumulative Metrics	Cumulative Current Half year as at 31 December 2012	Cumulative Current Half year as at 30 June 2012			
Construction commenced or completed ²					
Brownfields	784 592	280 142			
New Development Lots	60 686	13 885			
Fixed Wireless	21 684	7062			
Premises passed/covered					
Brownfields	46 078	28 860			
New Development Lots	26 251	10 054			
Fixed Wireless & First Release Interim Satellite	267 318	173 885			
Premises Activated					
Brownfields	6613	3364			
New Development Premises	3848	503			
Fixed Wireless & First Release Interim Satellite	24 062	9669			

Source Shareholder Ministers' Fourth Performance Report, Submission 3, p. 5.

- 2.4 For Premises Passed/Covered, analysis of the cumulative KPI metrics shows that for the half year ended on 31 December 2012 the NBN Co achieved:
 - Brownfields 17 218 premises passed/covered.
 - New development lots or Greenfields 16 197 lots passed/covered.
 - Fixed wireless and satellite 93 433 premises passed/ covered.
- Construction Commenced or Completed represents Fibre Serving Area Modules (FSAMs) where contract instructions have been issued together with the initial Network Design Document so that construction partners can commence work on the detailed design, field inspections and rodding/roping activities in a FSAM. This is followed by the release of a rollout map for the FSAM on the NBN Co web site showing the coverage area for that FSAM and the estimated number of premises to be passed/covered. Construction Commenced or Completed includes Premises Passed. Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 5.

- 2.5 For Premises Activated, analysis of the cumulative KPI metrics shows that for the half year ended on 31 December 2012 the NBN Co achieved:
 - Brownfields 3249 premises activated.
 - New development lots or Greenfields 3345 premises activated.
 - Fixed wireless and first release interim satellite 14 393 premises activated.

Current Progress

- 2.6 On 29 January 2013, the NBN Co released key metrics showing the progress of the NBN rollout for the periods covering the six months ended in June and December for the years from 2011 to 2013. A part of this release, the key NBN rollout metrics included actual and target figures (rounded to the nearest 00').³
- 2.7 These figures revised down the fixed wireless and satellite target for premises activated from 38 000⁴ to 37 700. This had the effect of lowering the total premises activated target by 300 premises. Table 2.2 shows the key NBN rollout metrics (rounded to the nearest 00) for the six month periods for June to December from 2011 to 2013.⁵ The figures (actual) provided in the Shareholder Ministers' Report for the cumulative current half year as at 31 December 2012 are underlined.

NBN Co, 2013, 34 500 Australian homes and businesses now using the NBN, media release, 29 January, p. 2.

⁴ NBN Co, Corporate Plan 2012-2015, p. 36.

NBN Co, 2013, 34 500 Australian homes and businesses now using the NBN, media release, 29 January, p. 2.

Table 2.2 Key NBN Rollout Metrics for the six month periods ended in June and December 2011-2013 (Construction commenced or completed, Premises/Lots Passed and Premises Activated)

	Actual	Actual	Actual	Target		
	June 2011	June 2012	Dec 2012	June 2013		
Construction commenced or comple	Construction commenced or completed					
	29 600	305 000	784 600	1 220 000		
Brownfields			<u>784 592</u>			
Greenfields	-	-	<u>60 686</u>			
Fixed Wireless	-	-	<u>21 684</u>			
Premises/lots passed						
Brownfields	18 000	29 000	46 100	286 000		
			<u>46 078</u>			
Greenfields	-	10 000	26 300	55 000		
			<u>26 251</u>			
Fixed wireless		9 000	17 300	320 000		
Satellite*	165 000	165 000	250 000			
Total (Fixed Wireless and Satellite)			<u>267 318</u>			
Total (premises/lots passed)	183 000	213 000	339 700	661 000		
			339 647			
Premises Activated						
Brownfields	600	3400	6600	44 000		
			<u>6613</u>			

Greenfields	-	500	3800	10 000
			<u>3848</u>	
Fixed Wireless	-	100	1000	37 700
Satellite	200	9600	23 100	
Total (Fixed Wireless and Satellite)			<u>24 062</u>	
Total (premises activated)	800	13 600	34 500	91 700
			<u>34 523</u>	

Source NBN Co, 2013, 34 500 Australian Homes and Businesses Now Using the NBN, p. 2 and Shareholder Ministers Fourth Performance Report, p. 5.

2.8 On the release of the above figures, the NBN Co stated:

The results reflect progress in the early stages of the rollout and are what we would expect given the time and work necessary to put in place the contracts and agreements needed to get to this point of execution. As can be seen by our targets, this rollout is not a linear progression, but a rapid ramp-up. We are targeting to pass more premises in the final quarter of the financial year than we will have passed in the entire project up to the beginning of that quarter. Additional construction resources will be added over the coming months to help achieve these targets.⁶

2.9 On 21 March 2013, the NBN Co revised down its rollout forecast for fibre to reflect a three month delay. The NBN Co stated:

The June 2013 Corporate Plan target of passing 341 000 premises with fibre is now expected to be achieved about three months later. Between 190 000 and 220 000 premises are now forecast to be passed by fibre by end June.⁸

⁶ NBN Co, 2013, 34 500 Australian homes and businesses now using the NBN, media release, 29 January, p. 1.

NBN Co, 2013, NBN Co updates short-term fibre rollout timeline, media release, 21 March, p. 1

⁸ NBN Co, 2013, NBN Co updates short-term fibre rollout timeline, media release, 21 March, p. 1.

- 2.10 The NBN Co attributed the rollout delay to a slower rate of rollout progress on the ground than forecast. The NBN Co stated that the 'delay will be recovered.'9
- 2.11 Immediate action undertaken by the NBN Co to remedy the current three month delay is outlined in detail in Chapter 4.
- 2.12 Although the NBN is currently delayed, the NBN Co expects that the NBN will still be completed by 2021 with the overall cost of the NBN to remain unchanged.¹⁰

Updated Three-Year NBN Rollout Plan

- 2.13 On 5 May 2013, the Government together with the NBN Co released an updated three-year NBN rollout plan which provides a timeline for another 1.35 million premises (or 190 new towns and groups of suburbs, homes and businesses) to be added to the NBN.¹¹
- 2.14 The NBN Co stated that for areas that have had the NBN fibre network for over twelve months, about one third of families have elected to be connected to the NBN and of these about a third have subscribed to the fastest available speeds.¹²
- 2.15 The NBN Co also stated the pricing of NBN packages is competitive and highlighted a recent study undertaken in the first release site of Brunswick, Melbourne which found:

...nearly half of existing NBN users polled said household internet costs were roughly the same since switching to the NBN, and 14% were paying less by using an internet phone service instead of a separate land line. Generally, those paying more were willing to do so to get higher speeds or larger download allowances.¹³

⁹ NBN Co, 2013, NBN Co updates short-term fibre rollout timeline, media release, 21 March, p. 1.

¹⁰ NBN Co, 2013, NBN Co updates short-term fibre rollout timeline, media release, 21 March, p.1.

¹¹ NBN Co, 2013, Broadband rollout plan extends to nearly 5 million homes and businesses, media release, 5 May, p. 1; Conroy S (Minister for Broadband, Communications and the Digital Economy), 2013, *Labor's NBN Coming to Another 1.3 Million Premises across Australia*, media release, 5 May, p. 1.

¹² NBN Co, 2013, Broadband rollout plan extends to nearly 5 million homes and businesses, media release, 5 May, p. 1.

NBN Co, 2013, Broadband rollout plan extends to nearly 5 million homes and businesses, media release, 5 May, p. 1.

Key Performance Indicators

Background

- 2.16 The KPIs included in the Shareholder Ministers' Performance Report show figures for similar categories to those presented in the previous Performance Report. Data is again presented as cumulative year on year.
- 2.17 This includes three main categories for:
 - Construction commenced or completed
 - Premises passed/covered
 - Premises activated.
- 2.18 These three main categories are further divided into:
 - Brownfields
 - New Development Lots
 - Fixed Wireless (for construction commenced or completed) or a combined Fixed Wireless and First Release Interim Satellite (for the two main categories of premises passed/covered and premises activated).
- 2.19 To date the committee has also received information relevant to the NBN rollout for the six month period ended on 30 June 2011 to the six month period ended 31 December 2012. This has provided the committee with four performance reports and two years of NBN rollout information.
- 2.20 The KPI categories contained in these four performance reports have been consolidated and presented in Table 2.3.
- 2.21 Table 2.3 shows the changes in the way information about the NBN rollout has been presented to the committee. In the Shareholder Ministers' First Report information was presented in the two categories of premises passed and premises activated. The Shareholder Ministers' Second Report added another main category of work under way (WuW) and included 'covered' together with the main category of premises passed. Subcategories of: Brownfields, New Developments, First Release Interim Satellite and Fixed Wireless were also added.
- 2.22 The Shareholder Ministers' Third Report removed the category of WuW and replaced it with Construction Commenced. The subcategory of New Developments was changed to New Development Lots and the subcategories of First Release Interim Satellite and Fixed Wireless were added together to create the subcategory of Fixed Wireless and Satellite.
- 2.23 The Shareholder Ministers' Fourth Report changed the main category of construction commenced to construction commenced or completed. The subcategory of fixed wireless and satellite was changed to fixed wireless and First Release Interim Satellite.

Table 2.3 NBN Rollout KPIs used to indicate NBN Rollout Progress in Shareholder Ministers' Performance Reports 1 to 4

KPI Main Categories				
RN1 (June 2011)	RN2 (December 2011)	RN3 (June 2012)	RN4 (December 2012)	
	Work Under Way	Construction Commenced	Construction commenced or completed	
Premises Passed	Premises passed/covered	Premises passed/covered	Premises passed/covered	
Premises Activated	Premises Activated	Premises Activated	Premises Activated	
FTTP Greenfields				
KPI Sub Categories				
RN1(June 2011)	RN2(December 2011)	RN3 (June 2012)	RN4(December 2012)	
(FTTP Greenfields category only)	Brownfields	Brownfields	Brownfields	
Developer applications	New Developments	New Development Lots	New Development Lots	
Active applications	First Release Interim Satellite	Fixed Wireless and Satellite	Fixed Wireless and First Release Interim Satellite	
Contracts signed	Fixed Wireless			

Source Shareholder Ministers' Performance Reports 1 to 4.

- 2.24 During the time the committee had been receiving Shareholder Ministers' Performance Reports the NBN Co publicly released a revised corporate plan which took into account the timeframe from 2012 to 2015. The 2012-2015 Corporate Plan publicly released on 6 August 2012 replaced the 2011-2013 Corporate Plan publicly released on 17 December 2010.
- 2.25 The NBN Co recently stated that it was in the process of revising its 2012-2015 Corporate Plan and would submit a new version to the Government in May 2013.¹⁴

Targets

2.26 The NBN rollout targets were originally included in the NBN Co 2011-2013 Corporate Plan and included separate tables for premises passed or

¹⁴ Mr Mike Quigley, CEO, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 7.

- covered (incremental year-on-year) and premises active service (incremental year-on-year). The majority of category titles for which targets were provided between corporate plans changed or categories were combined.
- 2.27 The NBN rollout targets were published with the public release of the 2011-2013 Corporate Plan on 17 December 2010. These targets were revised down with the public release of the 6 August 2012 Corporate Plan. The committee's Fourth Report outlines these changes in detail.
- 2.28 From the first corporate plan to the second, for total premises with active service, the figure for the financial year ended in 2011 is revised down by 34 200 premises; for 2012 the target figure is revised down by 102 500 premises; and for 2013 the figure is revised down by 327 000 premises.¹⁵
- 2.29 On 29 January 2012, with the release of the NBN rollout figures for the six months ended on 31 December 2012, the targets quoted for premises activated for combined fixed wireless and satellite network rollouts was revised down by 300 premises from the 2012-2015 Corporate plan, bringing the total NBN rollout target figure for June 2013, down by 300 premises to 91 700.¹⁶
- 2.30 Following this, on 21 March 2013, the NBN Co issued a statement that it would revise down its forecast for the rollout of fibre optic cable to reflect 'a delay of about three months.' The revised NBN rollout figures will be published in the new NBN Co Corporate Plan.
- 2.31 The NBN Co stated the current three month delay in the NBN rollout would not impact on the expected completion date or the cost of the NBN. The NBN Co stated:

At this stage there is no reason to say that the end date would shift, because, if you look at it overall, with $11\frac{1}{2}$ million or 12 million homes that we will connect, the 100,000 homes that slipped early in the program can typically be recovered. ¹⁸

2.32 In regard to the types of KPIs used and information provided to the committee, the performance report states:

This is the fourth report and as such reflects initial reporting while systems and reporting processes are still in development. The data

¹⁵ NBN Co, Corporate Plan 2011-2013, p. 15 and NBN Co, Corporate Plan 2012-2015, p. 36.

NBN Co, 2013, 34 500 Australian homes and businesses now using the NBN, media release, 29 January, p. 2.

¹⁷ NBN Co, 2013, NBN Co updates short-term fibre rollout timeline, media release, 21 March, p. 1.

¹⁸ Mr Ralph Steffens, Chief Operating Officer, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 15.

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 the rollout. Further KPIs will be brought online as agreed with the Shareholders.¹⁹

NBN Co Limited Unaudited Financial Result

- 2.33 The Shareholder Ministers' Performance Report includes unaudited consolidated financial statements for the NBN Group for the six months ended 31 December 2012.²⁰
- 2.34 Operational expenditure over the six month period ended on 31 December 2012 was approximately \$333 million which represents an increase of approximately \$46 million from the previous six month period.²¹ The forecast operating expenditure target in the 2012-2015 NBN Co Corporate Plan for the financial year ended June 2013 is \$1 093 million.²² The current result of \$333 million represents approximately 30 per cent of the target total.
- 2.35 Expenses were mainly attributed to:
 - \$153 million for employee related expenses
 - \$57 million for Information Technology and facilities expenses
 - \$29 million for external service costs.²³
- 2.36 Over the same period, capital expenditure increased from the previous six month period from approximately \$517 million to approximately \$792 million. The forecast capital expenditure target in the 2012-2015 NBN Co Corporate Plan for the financial year ended June 2013 is \$3 191 million. The current result of \$792 million represents approximately 25 per cent of the target total.
- 2.37 Total revenue over the six month period was \$29 314 000. Revenue was derived from:

¹⁹ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 38.

²⁰ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, pp 32-35.

²¹ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 6.

²² NBN Co, Corporate Plan 2012-2015, p. 77.

²³ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 31.

²⁴ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 6 and 31.

²⁵ NBN Co, Corporate Plan 2012-2015, p. 75.

- Telecommunications revenue \$5 262 000²⁶ (which rose from \$1 924 000 since June 2012)²⁷
- Other revenue \$70 000²⁸ (which rose from \$19 000 since June 2012)²⁹
- Interest income \$23 983³⁰ 000 (which fell from 60 164 000 since June 2012).³¹
- 2.38 Over the six month period the NBN Co experienced an operating loss of approximately \$408 million (the exact amount is \$408 268 000).³² This is almost double the loss experienced in the same period in 2011 of \$220 567 000.³³
- 2.39 Since its start-up, similarly to previous statements made, the NBN Co 'expects to record a tax loss in the current year' which is 'expected to continue for the next several financial years.' A nil income tax expense has been recorded with no deferred tax asset having been recognised for these tax losses at this point in time.³⁴

Regulatory Issues

NBN Co's Special Access Undertaking

- 2.40 On 18 December 2012, the NBN Co lodged a new Special Access Undertaking (SAU) with the Australian Competition and Consumer Commission (ACCC). The new SAU replaced the SAU lodged with the ACCC in December 2011 (and subsequently withdrawn on 7 September 2012).³⁵
- 2.41 The new SAU includes amended non-price terms which NBN Co stated arose from the now concluded 'Contract Development Process'. The SAU also contains other amendments which 'clarify the operation of the SAU.'36
- 2.42 On 4 April 2013, the ACCC released a draft decision on the new SAU. The ACCC stated 'notwithstanding the proposed variations, the draft decision

²⁶ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 32.

²⁷ Shareholder Ministers, 'Performance Report to 30 June 2012', Submission 4, p. 30. DDTWID

²⁸ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 32.

²⁹ Shareholder Ministers, 'Performance Report to 30 June 2012', Submission 4, p. 30.

³⁰ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 32.

³¹ Shareholder Ministers, 'Performance Report to 30 June 2012', Submission 4, p. 30.

³² Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 32.

³³ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 32.

³⁴ Shareholder Ministers, "Performance Report to 31 December 2012', Submission 3, p. 31.

³⁵ ACCC, NBN Co Special Access Undertaking (December 2012),< www.accc.gov.au>.

³⁶ ACCC, NBN Co Special Access Undertaking (December 2012), <www.accc.gov.au>.

notes that many features of the SAU have merit' however its preliminary view is that changes to the SAU are required as 'it is not satisfied that the SAU meets the relevant criteria for acceptance.'37

2.43 The ACCC has proposed to issue a formal notice to vary the NBN Co SAU. The proposed changes:

...are directed towards ensuring that, for matters not directly dealt with in the SAU, the access regime would continue to operate in the ordinary way. They would also preserve the primacy of commercially negotiated access agreements in the regime.³⁸

- 2.44 The ACCC has proposed the following key amendments:
 - 'Specific drafting amendments to provide certainty about how NBN Co will comply with its obligations under the telecommunications access regime; specifically any ACCC regulatory rulings;
 - Allowing for periodic price re-balancing through review by the ACCC the outcomes of these reviews would be constrained on the basis that any changes to price structures or relative prices must be revenue neutral in their effect;
 - Amendments to clarify that the ACCC could have a role in overseeing the withdrawal of products and the introduction of new products and their prices, should the need arise, mainly to support an effective price cap regime;
 - Amendments which allow a greater degree of flexibility in the approach that will be adopted at various points in time throughout the SAU, to mirror usual regulatory practice and so encourage efficient investment in and operation of the network; and
 - The removal of a number of proposed non-price terms from the SAU, including those relating to service levels, in order to facilitate effective commercial negotiation.'39
- The ACCC's proposed changes 'should deliver a framework for the regulation of NBN Co's services which:
 - 'Ensures consumers and businesses get services of broadly the quality they get today for broadly the price they get today. Consumers and businesses would only pay more for services and/or usage beyond what they get today;

³⁷ ACCC, 2013, ACCC issues draft decision on NBN Co Special Access Undertaking, media release, 4 April, p. 1.

³⁸ ACCC, 2013, ACCC issues draft decision on NBN Co Special Access Undertaking, media release, 4 April, p. 2.

³⁹ ACCC, 2013, ACCC issues draft decision on NBN Co Special Access Undertaking, media release, 4 April, pp 2-3.

- Allows for vigorous retail competition;
- Provides NBN Co with the opportunity, subject to efficient investment and adequate demand for its services, to earn a reasonable return on its investment (but no more);
- Provides NBN Co with incentives to not be wasteful, but to also innovate and invest to offer improved services/capacity over time in response to customer demand;
- Ensures that NBN Co and access seekers have incentives to commercially negotiate and agree non-price terms and conditions of access to NBN Co's services; and
- Provides a suitable balance, between certainty on key principles and flexibility over detailed terms of access, over the SAU's proposed 27 year term.'40
- 2.46 The ACCC has stated that the next step in the SAU assessment process is to issue the NBN Co with a formal notice to vary the SAU. Without any further variance to the current consideration process, the ACCC is required to make a final decision on the SAU by 19 July 2013.⁴¹
- 2.47 The ACCC stated the timeframe for consideration of the new SAU 'is consistent with timeframes for the ACCC's assessment of other undertakings and other regulatory processes.'42

Wholesale Broadband Agreement

- 2.48 Between 28 September and 30 November 2012, the NBN Co was undertaking discussions with customers in reference to the Wholesale Broadband Agreement (WBA). A final draft of the Contract Development Process relating to the WBA was released on 30 November 2012.⁴³
- 2.49 While the subsequent draft of the WBA has been placed on hold pending ACCC assessment of the SAU, the NBN Co will align the contents of its WBA with the finalised and accepted SAU.⁴⁴
- 2.50 The NBN Co has stated that it 'has proposed that the current WBA be extended pending the acceptance of the SAU.'45
- 2.51 The ACCC stated that it:

⁴⁰ ACCC, 2013, ACCC issues draft decision on NBN Co Special Access Undertaking, media release, 4 April.

⁴¹ ACCC, Submission 5, p. 1.

⁴² ACCC, Submission 5, p. 2.

⁴³ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 18.

⁴⁴ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 18.

⁴⁵ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 18.

...has previously indicated that it expects parties to agree to short term arrangements for the continuing supply of NBN Co's services until assessment of the SAU concludes and the regulatory framework is established.⁴⁶

Additional NBN Rollout Issues

Connecting Multi-Dwelling Units

- 2.52 The NBN Co stated that residential multi-dwelling units (MDUs) make up over 30 per cent of the 'addressable market.' As a result, a project to 'develop processes and capabilities to make those premises NBN ready' has been established.⁴⁷
- 2.53 Each MDU will be cabled from the 'multiport to the Premises Connection Device for each end user in parallel with construction of the FSAM.' The NBN Co is engaging contractors to manage the end-to-end cabling of MDUs under four MDU Cabling Partner (MCP) work packages:
 - 'MCP 1 On 21 December 2012, a contract was awarded to Downer EDI to complete MDU buildings in New South Wales (NSW), the Australian Capital Territory and Victoria.
 - MCP 2 On 21 December 2012, a contract was awarded to Universal Communications Group Limited to complete MDU buildings in Tasmania and NSW.
 - MCP 3 and 4 At 31 December 2012 bilateral negotiations were underway with awarding contracts to complete further MDU buildings.'48
- 2.54 In regard to the Downer EDI contract, the NBN Co announced:

...the signing of contracts with Downer EDI Limited and Universal Communications Group Limited for design and construction services covering a range of MDUs. These contracts will enable NBN Co to accelerate the rollout of the [Fibre-to-the-Premise] FTTP to around 17,600 blocks of flats and units across four states and territories over the next two years. The approximate value of the contracts is up to \$87 million.⁴⁹

⁴⁶ ACCC, Submission 5, p. 2.

⁴⁷ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 20.

⁴⁸ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 20.

⁴⁹ Shareholder Ministers, 'Performance Report to 31 December 2012', Submission 3, p. 11.

- 2.55 The NBN Co 2012-2015 Corporate Plan incorporates the lessons learned in regard to its experience in connecting MDUs to the NBN. This includes the move from the 'demand drop' approach, to a more efficient 'build drop' approach for installation and 'a higher degree of engagement with body corporate entities' including ahead of installation site surveys.⁵⁰
- 2.56 The NBN Co's definition of MDUs includes:

Premises that contain more than one dwelling unit, which can range from duplexes to 200+ unit apartment blocks. Each dwelling unit is assumed as equivalent to one [Geo Coded National Address File] GNAF (e.g. a 50 unit apartment block will have 50 GNAFs).⁵¹

2.57 The NBN Co offered a further explanation and stated Australian MDUs tend not to have a basement, but are basically individual homes E.g. townhouses, attached in blocks of nine or less units. The NBN Co stated:

...it is important to clarify the MDU situation, because people think of MDUs as high-rise tower blocks with hundreds of units in them like we see in Singapore, Hong Kong, Japan et cetera. But in Australia on average an MDU has nine units. The vast majority of these have three, four or five. In Europe we call them townhouses. They are horizontal MDUs. They are basically individual homes which are also classified as an MDU but you would obviously connect them individually. They do not lend themselves to technology in the basement. There are no basements in the first place. ⁵²

- 2.58 The NBN Co has previously stated that it will need to have a high degree of engagement⁵³ with body corporate entities and undertake site surveys ahead of time⁵⁴, which incurs additional costs.⁵⁵ This detailed design and installation for the internal cabling of MDUs would also incur increased costs.⁵⁶
- 2.59 The differentiation between single dwelling units (SDUs) and MDUs from the previous corporate plan to the current corporate plan therefore

⁵⁰ NBN Co, *Corporate Plan* 2012-2015, pp 14 and 45; Shareholder Ministers, 'Performance Report to 31 December 2012', *Submission* 3, p. 30.

⁵¹ NBN Co, Corporate Plan 2012-2015, p. 93.

⁵² Mr Ralph Steffens, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 18.

This is in line with the NBN Co's stakeholder engagement activities, NBN Co, *Corporate Plan* 2012-2015, p. 27.

⁵⁴ Mr Ralph Steffens, NBN Co, Transcript of Evidence, Canberra, 30 October 2012, p. 8.

⁵⁵ NBN Co, Corporate Plan 2012-2015, p. 45.

⁵⁶ Mr Ralph Steffens, NBN Co, Transcript of Evidence, Canberra, 30 October 2012, p. 8; NBN Co, Corporate Plan 2012-2015, p. 45.

incorporates 'a provision for increased MDU costs relating to the design and cabling of all End-User units inside MDUs.'57 This increased build and engagement cost of connecting MDUs to the NBN contributes to the overall customer connect costs which in turn serves to increase NBN Co's total capital expenditure.⁵⁸

2.60 The NBN Co explained that costing MDU connections to the NBN is 'a very strict process' undertaken by NBN Co's finance department and takes account of the differing MDU building types. In regard to making savings on MDU connections, the NBN Co also stated that it had investigated using the existing copper network and having a Digital Subscriber Line Access Muliplexer (DSLAM)⁵⁹ in MDUs with basements, however this option raised issues ensuring an analogue voice service. The NBN Co stated:

...the costings ...are done by our finance department. In fact, we have a very strict process whereby the architects do the architecture and the technical stuff. The only part of the company for which we rely on financial numbers is our finance department. What I can say to you is that obviously we looked at the various costs of doing things in different ways. ... a significant number of MDUs are really horizontal SDUs and so you have to treat them in an architecture sense and therefore in a financial sense as a single dwelling unit. There is a percentage that really do have basements and really do have main distribution frames and you can treat them as such. Obviously we looked at the option of running fibre into the basement, putting a small DSLAM into the basement and then using the existing copper. That has certain attractions, obviously, as you do not get into structural separation issues because normally that copper is owned by the building owner. There is no question there is a saving to be had by not having to fibre a multi-dwelling unit, but there are some other issues that need to be dealt with, such as how you ensure that you get analogue voice, which is a tricky issue. What I am really trying to say is that there is not a simple answer. It needs some very careful work because applying analogue voice in that situation is nontrivial.60

⁵⁷ NBN Co, Corporate Plan 2012-2015, p. 45.

⁵⁸ NBN Co, Corporate Plan 2012-2015, p. 76.

⁵⁹ A DSLAM is a 'network device normally located in telephone exchanges providing multiple ports connecting end-user copper lines for the provision of digital subscriber line broadband service. NBN Co, *Corporate Plan 2012-2015*, p. 90.

⁶⁰ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 18.

2.61 The NBN Co added that while it had investigated using the existing copper network to connect MDUs to the NBN, it was executing the Government's FTTP policy. The NBN Co stated:

...there are obviously ways you can look at doing MDUs using copper. We would be remiss if we did not have a look at that. It is an obvious thing to do, but it is a policy decision, and the government has been absolutely clear on what the policy is. It is to provide fibre to the premise into all MDUs. That is what we are executing on. That is what is happening.⁶¹

2.62 The NBN Co added that degradation of the copper network was not a consideration in using the existing copper network to connect MDUs to the NBN, but rather the Government's minimum internet speed policy under the NBN, as well as ensuring an analogue voice service for customers. The NBN Co explained:

It is not so much degradation [of the copper network] as the issue, when you are using the copper in [very high bit-rate digital subscriber line] VDSL, with what you do with analogue voice. That is one of the issues that you have to think about when you are looking at that. It is a speed product. This is, once again, a policy issue. Our job as a GBE [Government Business Enterprise] is to bring to the government the technical and operational facts and the costs of options. It is no more and no less than that.⁶²

2.63 The NBN Co stated the cost savings for connecting MDUs to the NBN (through building fibre to the basement) was not as great in Australia as in other countries such as Korea with a high percentage of high rise blocks, because Australian MDUs tend to be more like SDUs. The NBN Co stated:

Directionally, there are more high-rises in places like Korea than there are in Australia, so you would not expect it to make as big a difference [in cost savings] in Australia as it does in those other countries. You would not expect it to, for the reasons we talked about before: because you have more horizontal MDUs, which are more like SDUs.⁶³

2.64 The NBN Co is spending \$9.8 billion in connecting SDU and MDU customers to the NBN, the individual cost of which has fallen from \$2400 per premise as the connection model has changed and the number of installations has increased over time to \$1100 per premise. The NBN Co explained:

⁶¹ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 39.

⁶² Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 39.

⁶³ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 28.

...customer connect. That is the bit that goes from the multiport, the connection in the street, into the home. It is comprised of two parts: the drop and then the in-premises activity. We did a number of initial sites—several thousand—on a different model and the cost of those was \$2,400. We got some learnings from that, we changed the model and now we are proceeding into volume. That is, once again, several thousand. This is a blend, by the way, of SDUs and MDUs—single dwelling units and multi-dwelling units. The volume actuals we are getting are around \$1,100, which is in fact right on our corporate plan estimate of \$1,100. Just to remind you what all of that is for, it is for connecting 6.9 million premises and passing and doing the build drops for the remainder. In fact, some of it is for drops into premises that ultimately may not be connected or may not have an active service, but it encompasses all of that. So we are very comfortable with our \$9.8 billion.⁶⁴

2.65 In terms of its progress in connecting MDUs to the NBN the NBN Co was encountering 'a lot of support' and stated:

...for MDUs, we are going through a very structured process in identifying the strata owners. To date—and again it is early days—we see a lot of support, and we do not see too many issues in that respect. But ultimately we are going to engage with every single household in Australia; hence, I would not say that there will never be any issues going forward. I am sure that there will be problems to be resolved as we go along.⁶⁵

Costing NBN Models

- 2.66 On 7 April 2009, the then Government announced the establishment of the NBN Co Limited to design and build the super-fast ubiquitous NBN⁶⁶ which, upon the public release of the first corporate plan in December 2010 was estimated to have a total project expenditure of \$35.9 billion.⁶⁷
- 2.67 The NBN would:
 - 'connect [with 90 per cent coverage] homes, schools and workplaces with FTTP, providing broadband services ... in urban and regional

⁶⁴ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 7.

⁶⁵ Mr Ralph Steffens, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 29.

⁶⁶ Hon Kevin Rudd MP, Prime Minister and Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'New National Broadband Network', media release, 7 April 2009.

⁶⁷ Hon Kevin Rudd MP, Prime Minister and Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'Government Releases NBN Co Corporate Plan', media release, 20 December 2010.

- towns with speeds of 100 megabits per second 100 times faster than those currently used by most people extending to towns with a population of around 1,000 or more people⁶⁸
- use next generation wireless and satellite technologies that will be able to deliver 12 megabits per second or more to' remote and regional areas
- 'provide fibre optic transmission links connecting cities, major regional centres and rural towns
- be Australia's first national wholesale-only, open access broadband network
- be built and operated on a commercial basis by a company established at arm's length from Government involving private sector investment
- be expected to be rolled-out, simultaneously, in metropolitan, regional, and rural areas.'69
- 2.68 More than a year later on 6 May 2010, the NBN implementation study was released which the Government stated 'confirms that high-speed broadband for all Australians is achievable, and can be built on a financially viable basis with affordable prices for consumers.'⁷⁰
- 2.69 The Implementation Report prepared jointly by McKinsey and Company and KPMG made 84 recommendations regarding the NBN in relation to: technology, financing, ownership, the network policy framework and market structure. 71
- 2.70 The scope of the NBN Implementation Study was to 'advise Government on how best to implement its stated policy objectives, not to evaluate those objectives'. The Implementation Study stated that it did not:
 - 'Evaluate the Government's policy objectives
 - Evaluate the decision to implement the NBN via the establishment of NBN Co
- 68 This was later increased to 93 per cent coverage following a recommendation of the July 2010 NBN Implementation Study. Hon Julia Gillard MP, Prime Minister, Hon Wayne Swan MP, Deputy Prime Minister and Treasurer, Senator the Hon Penny Wong, Minister for Finance and Deregulation and Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'Government releases NBN Co Corporate Plan', media release, 20 December 2010.
- 69 Hon Kevin Rudd MP, Prime Minister and Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'New National Broadband Network', media release, 7 April 2009.
- 70 S Conroy (Minister for Broadband, Communications and the Digital Economy, L Tanner (Minister for Finance and Deregulation), 2010, Landmark Study Confirms NBN Vision is Achievable and Affordable, media release, 6 May, p. 1.
- 71 S Conroy (Minister for Broadband, Communications and the Digital Economy, L Tanner (Minister for Finance and Deregulation), 2010, Landmark Study Confirms NBN Vision is Achievable and Affordable, media release, 6 May, p. 1.

- Undertake a cost-benefit analysis of the macro-economic and social benefits that would result from the implementation of a superfast broadband network.'72
- 2.71 Since the release of the implementation study in May 2010, the NBN rollout is still in its early start-up phase which is evidenced by the NBN Co's financial results and the rate of the NBN rollout ramp up.

Fibre-to-the Premise and Fibre-to-the-Node

- 2.72 Since the announcement of the NBN, there has been regular public debate about the advantages and disadvantages of a high speed broadband network delivered using either a FTTP or a Fibre-to-the-Node (FTTN) platform.
- 2.73 The FTTP or Fibre-to-the-Home option delivers the broadband fibre network directly into the premise or home and FTTN is a mix of fibre and copper network, where the fibre is terminated at a node or cabinet in the street and then run with a copper cable into the premise or home.
- 2.74 In its First Review, the committee reported on how fibre optic technology had been selected to support the NBN over alternative technologies, because of the superior performance of a fibre network over a copper network, wireless and Hybrid Fibre Coaxial (HFC).
- 2.75 The NBN Co website also states that at the time prior to the build of the NBN, the Government was advised the proposals for a FTTN network did not 'represent value for money'. The NBN Co website states:

The Government announced its decision to establish NBN Co in April 2009, after the Government received advice that none of the proposals submitted from interested parties to build a smaller-scale, Fibre-To-The-Node network represented value for money.⁷³

2.76 The NBN Co stated that the FTTP while having a greater short term cost, was superior to the FTTN as it has a greater long term benefit. The NBN Co stated:

Some countries are choosing to do fibre to the node or, increasingly, not just fibre to the node but fibre to the kerb or fibre to the cabinet, pushing the fibre even further out. In the end, it is a long-term, short-term trade-off, you would have to say. There are some pluses to a fibre-to-the-node rollout. You could do a fibre-to-the-node rollout to a part of Australia — certainly not 93 per cent. You could not use fibre to the node to get 93 per cent of premises

⁷² Australian Government, 2010, National Broadband Network Implementation Study, Mackenzie and Company and KPMG, 6 May, pp I and ii.

⁷³ NBN Co, Frequently Asked Questions, <www.nbnco.com.au>, p. 3.

with a high-speed service. You could go only so far and then you would start to run into the problems you have with ADSL and ADSL2, unless you just keep pushing that fibre further and further, which will make the copper loops shorter and shorter, so there is a cost-benefit trade-off there. But, remember, as you push the fibre further and deeper and make the copper loops shorter and deeper with a fibre to the node or fibre to the cabinet, you need to put in more and more and more cabinets. Each one of those cabinets needs to be powered and active, and then they will have the same issues that we have talked about, such as of water ingress. So there comes a point at which you say this still is not the end architecture. Almost everybody in the world says that the right end architecture is fibre to the premise.⁷⁴

2.77 The Department of Broadband, Communications and the Digital Economy (DBCDE) explained the FTTP option would deliver a better competition outcome than the FTTN option as well as deliver better value for money. The DBCDE stated:

The Government started out with fibre to the node and ran a tender process for that purpose. For whatever reason the Telstra proposition to that failed and the independent panel that assessed the bids said there was no value for money. And probably the most important aspect for me when I came in and looked at this is that the ACCC said that this investment in fibre to the node was unlikely to necessarily deliver the kind of benefit that the Government perceived of it and that a substantial part of it would effectively be wasted, in terms of a competition outcome. So the Government is there, again, with an attempt to do fibre to the node that was previously unsuccessful and it is required to either do nothing or move up to fibre to the premises. It chose to move up to fibre to the premises...⁷⁵

2.78 On 9 April 2013, *The Coalition's plan for fast broadband and an affordable NBN* was announced. This plan for the NBN relies on a FTTN to deliver fast broadband to brownfields areas (or areas with existing copper networks) and 'where commercially feasible' with a reliance on a fibre network for new developments (or Greenfields) and where there is sufficient demand

⁷⁴ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 16 May 2011, pp 24–25.

⁷⁵ Mr Peter Harris, Secretary, DBCDE, Transcript of Evidence, Sydney, 16 May 2011, p. 39.

⁷⁶ Abbott T, 2013, The Coalition's Plan for Fast Broadband and an Affordable NBN, media release, 9 April.

to justify it, with examples of business districts, industrial and commercial parks, schools, hospitals and the like.⁷⁷

2.79 The alternative FTTN NBN would:

...extend fibre to cabinets within a few hundred metres of user premises or into the basements of apartment blocks. Fibre to the Node increases bandwidth at manageable expense by making use of the existing copper infrastructure over the last few hundred metres before reaching the customer's premises. Within a few years FTTN should support downloads exceeding 100 megabits per second over short lengths of copper. According to NBN Co's own bullish projections of user demand, such a ceiling would encompass the download speeds four fifths of NBN users are forecast to demand a decade from now. This proves there is still plenty of scope for legacy infrastructure to play a part in providing bandwidth. Of course fibre should generally run all the way to premises in new (Greenfields) housing estates, unless this isn't commercially feasible. In some places especially high maintenance costs may require copper to be replaced with fibre. Fibre would also typically extend to anywhere there is demand sufficient to justify it - business districts, industrial and commercial parks, schools, hospitals, medical centres and universities are just some examples.78

- 2.80 The Coalition has stated that under its NBN policy it would conduct:
 - 'A rigorous review into NBN Co's current commercial progress and options to meet the Coalition's policy objectives.'
 - An independent audit into how the NBN was arrived at
 - 'An independent review into the long-term structure and regulation of telecommunications.'79
- 2.81 During the committee's Second Review, the Productivity Commission stated that if formally required, it was within its technical capacity to undertake analysis on the cost effectiveness of different forms of delivering high speed broadband. The Productivity Commission stated:

That would be within our technical capacity, drawing on proper expertise of course. We do not profess to be telco-specific analysts.

⁷⁷ Coalition, 2013, The Coalition's Plan for Fast Broadband and an Affordable NBN, April, pp 5 and 6.

⁷⁸ Coalition, 2013, The Coalition's Plan for Fast Broadband and Affordable NBN, April, pp 5 and 6

⁷⁹ Abbott T, 2013, The Coalition's Plan for Fast Broadband and an Affordable NBN, media release, 9 April, p. 2.

But, drawing on appropriate expertise, we could provide some advice to the committee if that were formally requested of us and we were prioritised to do that. We would want to undertake the project thoroughly and properly within our normal behaviour, rather than do it as an ad hoc research adjunct.

...As a matter of course, the Productivity Commission has very open and transparent processes and always engages fully with all stakeholders. People see us as a neutral entity and therefore we do get close cooperation—because of the role we play. Certainly we would not want to move beyond that which is our core strength and gives us our credibility on other significant issues.⁸⁰

- 2.82 On 22 February 2013, Mr Mike Quigley, Chief Executive Officer (CEO) of the NBN Co announced that the NBN Co had approached peak industry body, The Communications Alliance to seek a study into the advantages and disadvantages of alternative NBN models.⁸¹
- 2.83 In early May 2013, it was reported the Communications Alliance ruled out conducting the proposed study.⁸²
- 2.84 When asked whether the NBN Co could consider a potential change in NBN policy within the framework of a corporate plan, the NBN Co commented:

... a GBE does not enter into costing or working up corporate plans other than for the job that the government of the day has given it to work on. So we do not go off speculating on that and trying to develop alternatives. But I think that if you ask a question then we are obliged to answer the question.

...Yes, we have the capability. But, as when we were developing the architecture, the design and ultimately the corporate plan for the network we are currently building, there are a large number of issues that need to be clarified before you can proceed with that.⁸³

⁸⁰ Mr Michael Woods, Deputy Chairman, Productivity Commission, Transcript of Evidence, Sydney, 24 October 2011, p. 26.

⁸¹ Binegmann, M, 'NBN can still be changed: Quigley', *The Australian*, 23 February 2013, p. 1; McDuling J, 'Quigley Stuck in an NBN Quagmire', *The Australian Financial Review*, 2 March, p. 21.

⁸² Bingemann M, 'Telcos Reject Call for Study on NBN System', The Australian, 6 May 2013, p. 6.

⁸³ Mr Mike Quigley, NBN Co, Transcript of Evidence, Sydney, 19 April 2013, p. 14.

Concluding Comments

National Broadband Network Rollout Progress Over the Period

2.85 The progress of the NBN rollout for the period ended 31 December 2012, cannot properly be gauged or compared to progress in the previous six month period as there is no published half year target for the NBN rollout included in either the Shareholder Ministers' Performance Report or the NBN Co Corporate Plan. This was the same issue encountered during the committee's Third Review which examined NBN rollout data for the period ending in the middle of a financial year.

Current Progress of the National Broadband Network Rollout

- 2.86 On 29 January 2013, the NBN Co announced that it was ramping-up the NBN rollout with the aim of passing more premises in the final quarter of the financial year than had been passed in the entire project up to the beginning of that quarter.⁸⁴
- 2.87 Two months later, on 21 March 2013, the NBN Co announced that it would revise its targets to take into account a three month delay in the NBN rollout. The delay was attributed to a slower rate of rollout progress on the ground by contractors than originally forecast.
- 2.88 The NBN Co states the current three month delay in the NBN rollout is not expected to delay the overall timeframe for the entire NBN rollout or affect total cost.
- 2.89 In early May 2013, the NBN Co released an updated three-year rollout plan which lists an additional 1.35 million premises that are scheduled to receive the NBN.

Key Performance Indicators and Corporate Plan Targets

- 2.90 The committee has previously commented that the NBN rollout data provided in tabular form in the Shareholder Ministers' Report does not readily enable comparison of progress against established corporate plan targets. Information provided in the Shareholder Ministers' Report is again presented in a way which does not enable comparison with corporate plan targets without checking against those targets separately.
- 2.91 Information contained in Table 2.3 shows how NBN rollout KPI categories have changed between performance reports. As previously reported the targets (contained in the Corporate Plans) have also been revised down

NBN Co, 2013, 34 500 Australian homes and businesses now using the NBN, media release, 29 January, p. 1.

- between corporate plans and again with the release of NBN rollout information on 29 January 2013, which saw a revision of targets for the satellite network. Targets in the NBN Co Corporate Plan will again be revised to take into account the three month delay in the NBN rollout.
- 2.92 The NBN Co has on previous occasions stated that the underlying premise of factors affecting the NBN rollout have changed and so corporate plan targets have changed. In addition, the NBN Co qualifies the information it has presented to the committee in addition to that contained in the Shareholder Ministers' Performance Report. In the information it provided to the committee at its hearing on 19 April 2013, the NBN Co qualified its forward looking statements stating no assurance is given to any third party 'that the results, performance or achievements expressed or implied by such Statements will actually occur, and no third party should rely upon the Statements or consider them as a representation of what will happen.'85
- 2.93 Together these issues culminate in the situation where tracking the progress of the NBN rollout is made more complex and reliance is placed on qualitative statements made in the public domain about NBN progress, rather than on published quantitative data.
- 2.94 Given that the NBN is the largest ever infrastructure project undertaken in Australia, at this early stage of the NBN rollout, it is timely that there be greater rigour placed on the public reporting of the financial and physical aspects of the NBN rollout.

NBN Co Unaudited Financial Result

- 2.95 The Performance Report covers the period which ends in the middle of the 2012-2013 financial year and shows a consolidated operating loss of approximately \$408 million, almost double that experienced in the same period in the previous year. Over the same period in the previous year, revenue marginally declined.
- 2.96 Capital expenditure for the period was well below the corporate plan target, with the amount spent of \$792 million approximately 25 per cent of the target total. Operational expenditure was \$333 million which represents approximately 30 per cent of the target total.

Regulatory Issues

- 2.97 In December 2012, the NBN Co lodged a new SAU with the ACCC which replaces the NBN Co's SAU lodged with the ACCC in December 2011.
- 2.98 While the ACCC is still considering the SAU, in early April 2013, it issued a draft decision on the SAU providing suggestions to NBN Co for changes

- to the SAU. The ACCC has stated that the next step in the process is for it to issue a formal notice to the NBN Co to vary the SAU. The ACCC is required to make a final decision on the SAU by 19 July 2013.
- 2.99 A final draft of the CDP under the WBA was released on 30 November 2012. The NBN Co will align the contents of its WBA with the finalised and accepted SAU. As has previously occurred, in the interim, existing WBA signed between parties are expected to be extended.

Connecting Multi-Dwelling Units

- 2.100 The NBN Co is spending \$9.8 billion to connect SDU and MDU customers to the NBN, the individual cost of which has fallen from \$2400 to \$1100 per premise, as the connection model has changed and the number of installations has increased over time.
- 2.101 The NBN Co also stated that it had investigated making use of the existing copper network to connect MDUs, but that this approach was not taken as it presented issues in ensuring a high speed connection and analogue voice services for customers. Finally it was not in line with Government policy in regard to building a FTTP connection.
- 2.102 Although still in the early stages of the NBN rollout, the NBN Co has stated that it has received 'a lot of support' in connecting MDUs to the NBN.

Costing NBN Models

- 2.103 The Government's NBN Implementation Study was not tasked with evaluating the merits of alternative fast broadband options, or conducting a cost benefit analysis of these options.
- 2.104 With increasing recent debate about an alternative way to deliver high speed broadband across Australia, the need for a cost benefit analysis of options available to deliver high speed broadband is timely. The NBN Co is best placed to undertake this kind of costing within the framework of its Corporate Plan.

Recommendation 1

2.105 The committee recommends the Government task the NBN Co Limited to update its Corporate Plan 2012-2015 to prepare strategies to minimise risk in any policy changes that may reasonably be expected to occur in the 2012-2015 period.