

Review of National Broadband Network Rollout Progress

Introduction

- 2.1 The Government's National Broadband Network (NBN) rollout Performance Report (the Performance Report) was provided to the committee on 23 September 2011. The content of the Performance Report is based on information provided by the NBN Co to Shareholder Ministers under its obligatory reporting arrangements and includes:
- A summary of the key milestones achieved by the NBN Co.
 - [Unaudited] Year to date financial reports for the period ended 30 June 2011, including profit and loss statements, [a balance sheet] and a consolidated statement of cash flows.
 - Measurement against the NBN Co's Key Performance Indicators (KPIs) as at 30 June 2011.¹
- 2.2 Issues raised through examination of the Government's Performance Report are included in the relevant chapters of this report. This chapter outlines and discusses a number of the issues associated with both the qualitative and quantitative information contained in the Performance Report, and the timeframe during which the committee has received this information. In addition, comment is made on how the committee may be able to participate in the consideration and development of KPIs and measures.

¹ Shareholder Ministers, *Submission 19*, p. 1.

Performance Reporting

Reporting Intervals

- 2.3 On 7 July 2011, the Shareholder Ministers wrote to the committee advising that the Government was in the process of 'finalising an appropriate reporting framework including key performance indicators on NBN Co's activities, which [could] be used as a basis for reports to both the Government and to [the] committee.'²
- 2.4 The Shareholder Ministers indicated that performance information on the NBN rollout in the form of an update (which would be based on information received from NBN Co) would be provided to the committee by mid September 2011.³
- 2.5 The Shareholder Ministers explained that providing this information earlier presented 'practical challenges' and stated mid September timeframe would ensure enough time for such a report to be drafted and for the inclusion of recent NBN rollout developments. The Shareholder Ministers stated:
- For the first report, there are practical challenges to providing the committee with appropriate material before mid September. It is important to ensure that there is time for NBN Co management to prepare a report of satisfactory quality, for the NBN Co Board to perform appropriate due diligence in reviewing the content of the report, and for initial Government consideration of the report. This timing would also ensure that the Government is able to provide the committee with relevant information surrounding recent developments as part of its first report.⁴
- 2.6 On 18 August 2011, the committee informed the Shareholder Ministers that it had noted the timeframe of mid September 2011 for receiving the Government's Performance Report. Taking into consideration the mid
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2 Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy and Senator the Hon Penny Wong, Minister for Finance and Deregulation, Correspondence to the Joint Committee on the National Broadband Network (JCNBN), dated 7 July 2011.

3 Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy and Senator the Hon Penny Wong, Minister for Finance and Deregulation, Correspondence to the JCNBN, dated 7 July 2011.

4 Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy and Senator the Hon Penny Wong, Minister for Finance and Deregulation, Correspondence to the JCNBN, dated 7 July 2011.

September reporting timeframe, the committee indicated it would arrange a public hearing on 20 September 2011 to examine the Performance Report.

- 2.7 In view of the Government's mid September reporting date, the committee also proposed that under its Resolution of Appointment (RoA) it would report to the Parliament by 31 August 2011, and then seek to amend its RoA to enable it to report in June and December instead of August and February.
- 2.8 In addition to providing further opportunities for examination of the Performance Report, the purpose of the committee's proposed new reporting timeframe was to enable the performance reporting period to align with existing NBN Co reporting arrangements in place with the Shareholder Ministers. This would assist in avoiding duplication of the reporting process on these matters. This timeframe would also enable the committee to undertake a more thorough examination of NBN rollout issues.
- 2.9 Referring to performance reporting, in its First Report the committee found:
- For NBN targets and KPIs, the committee expected the KPIs and performance measures to be resolved between the NBN Co, the Department of Broadband, Communications and the Digital Economy (DBCDE) and the committee as a matter of priority.
 - In regard to the Government's mid September 2011 reporting timeframe, at the earliest, the DBCDE and the NBN Co were aware of the committee's terms of reference and its August reporting date at its establishment in March 2011 and could have anticipated the committee's requirements in terms of reporting on NBN data. In addition, the committee made repeated requests to the DBCDE and the NBN Co for data on KPIs for the NBN rollout and performance measures.
 - There would be a benefit in receiving NBN rollout performance information on a six-monthly basis, in line with its expected June/December reporting timetable, so that short term and long term trends could be easily identified, examined and possibly benchmarked.
- 2.10 As a result of these findings, the committee recommended:
- that the NBN Co and the DBCDE, commencing for the first quarter 2011-12, provide a six-monthly report on the progress of the rollout of the NBN, using established KPIs and performance measures, no later

than three months before the committee is due to report to the Parliament.⁵

NBN Co Reporting Requirements

2.11 The Government's⁶ Statement of Expectations (SoE) outlines the NBN Co's responsibilities in respect to planning, reporting and performance management in line with its obligations as a Government Business Enterprise (GBE).⁷ The SoE states the purpose of the NBN Co's regular report will enable the Government to 'measure NBN Co's performance.'⁸

2.12 As part of its planning, reporting and performance management responsibilities, the Government expected that the NBN Co would:

- Report regularly to the Government to enable NBN Co performance to be measured. This includes reporting through an annual report and interim reports as required.
- Include in its annual report details on the NBN rollout cost and performance, achievement of service levels, faults, customer complaints, details of its progress towards meeting its coverage objectives and any expenditure incurred as a result, and other matters as advised by the Shareholder Ministers.
- In consultation with the Government, develop KPIs to enable monitoring against the NBN Co Corporate Plan and Business Plan.
- Continue to report to the Parliament and its committees, with particular reference to this committee.
- During the NBN rollout, develop a comprehensive strategy for engaging with individual consumers, including a complaints handling mechanism, and regularly report against this strategy to Government.
- In line with its practice of publishing a number of consultation, position and option papers about its planning, strategy development and operations, 'continue to conduct its planning and the execution of its

5 JCNBN, *Review of the Rollout of the National Broadband Network*, First Report, August 2011, Recommendation 1.

6 As sponsored on behalf of the Government by the Shareholder Ministers and released on 20 December 2010, p. 11.

7 This is in addition to its annual reporting obligations as prescribed in the *Commonwealth Authorities and Companies Act 1997* (Cth), and the *Governance Arrangements for Commonwealth Government Business Enterprises*, June 1997, Australian Government, *Statement of Expectations*, 20 December 2010, p. 11.

8 Australian Government, *Statement of Expectations*, 20 December 2010, p. 11.

strategy in a publicly transparent manner subject to any requirements for commercial confidentiality, and reflect this in its annual reporting.⁹

Development of Key Performance Indicators

- 2.13 Early after its establishment in March 2011, the committee expressed interest in receiving a regular NBN rollout performance update from the NBN Co and Shareholder Ministers or the DBCDE.
- 2.14 At a meeting in May 2011 with the NBN Co and the DBCDE, the committee expressed its interest in participating in the consideration and development of the content of the Performance Report as well as the relevant KPIs and measures that would be included in its Second Report.
- 2.15 At the committee's 5 July 2011 public hearing, the NBN Co indicated that it had been working closely with the Government to develop KPIs. The NBN Co stated that, once this process was complete, the Government would consult with the committee to determine the KPIs on which it would seek data. The NBN Co stated:
- We have been working closely with the Government on a range of KPIs. My understanding is that the instructions to us from the Government are that when that is established the Government will liaise with the committee to find which of those KPIs you would be interested in seeing.¹⁰
- 2.16 In correspondence to the committee dated 7 July 2011, the Shareholder Ministers stated that the NBN Co was in the process of finalising 'an appropriate reporting framework including KPIs on NBN Co's activities which could be used as the basis for reports to both the Government and the committee.'¹¹
- 2.17 At the committee's 13 October 2011 public hearing, in regard to the types of information provided in the Performance Report, the DBCDE stated that, as a starting point, it had included information that was requested earlier by the committee, and that it would build on this information in future reports. The DBCDE stated:

9 Australian Government, *Statement of Expectations*, 20 December 2010, p. 11.

10 Mr Mike Quigley, CEO, NBN Co, Transcript of Evidence, Canberra, 5 July 2011, p. 4.

11 Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy and Senator the Hon Penny Wong, Minister for Finance and Deregulation, Correspondence to the Joint Committee on the National Broadband Network, dated 7 July 2011.

On the performance benchmarks, there was a presentation to this committee in June, I think. I was not present personally but I understand there was a discussion about a proposal from Commonwealth officials then about what might be included in the report. That has been the base for this report and for subsequent reports. As the note to the KPI says, the material becomes more meaningful as it is added to and developed over time. If there are areas in which the committee would like reporting, you are very free of course to ask the Government for reports on those and the Minister would consider those, I am sure. This is a start rather than the steady set of reporting arrangements.¹²

2.18 The committee was also informed that it was not receiving from the Government via the DBCDE, the same type of information, in the same format as the NBN Co was reporting to the Shareholder Ministers.¹³

2.19 When asked about the points of difference in the reporting information received by the Shareholder Ministers from the NBN Co and that subsequently provided to the committee by the Shareholder Ministers, the DBCDE stated:

On the content that you have been provided, the company provided a quarterly report to the government as shareholder. The Government considered that and has deleted some material that would not normally be provided publicly – and was not provided in the corporate plan that was released last December – such as commercially sensitive material about risks that the company is facing and some forward looking material. Because of the passage of time there was, as you have noted, a month between the arrival of the report and its provision to the committee. There was also some additional material added to pick up developments over that period. That explains almost all the changes that were made.¹⁴

12 Mr Daryl Quinlivan, Deputy Secretary, Infrastructure Group, Department of Broadband, Communications and the Digital Economy (DBCDE), Transcript of Evidence, Canberra, 13 October 2011, p. 6.

13 Mr Quinlivan, DBCDE, Transcript of Evidence, Canberra, 13 October 2011, p. 6.

14 Mr Quinlivan, DBCDE, Transcript of Evidence, Canberra, 13 October 2011, p. 6.

Key Features of the Performance Report

Content and Format

2.20 The Government's Performance Report is presented as a mix of qualitative and quantitative information on the NBN rollout, covering the financial year ended on 30 June 2011. In particular, the Performance Report includes information in the following broad categories:

- **Commercial Negotiations and Events** which includes information about the Telstra and Optus Binding Definitive Agreements, the Commonwealth Funding Agreement between the NBN Co and the Government, and communication.
- **Operational Achievements** which includes product definition.
- **Networks** which includes data on the progress of the NBN rollout to specific first release and second release sites across the three technologies of fibre, wireless and satellite.
- **Resources** which includes information about NBN Co staff, organisational effectiveness, health, safety and environment information, industrial relations, premises and security, and information technology.
- **Regulatory and legal matters**, including developments in consideration by the Australian Competition and Consumer Commission (ACCC) of the Telstra and Optus Binding Definitive Agreements, the Telstra Structural Separation Undertaking (SSU) and Customer Migration Plan and the Wholesale Broadband Agreement (WBA), and an update on the negotiations over the Long Term Satellite Service (LTSS) with the Australian Communications and Media Authority.
- **Risks**, including identified risks relating to safety, quality, the Telstra and Optus Agreements, construction, revenue, operational support systems and Greenfields.
- **Unaudited Financials** which includes information about the NBN Corporate Plan, and the NBN Co's financial result and tax treatment.
- **Post Closing Events** which outlines a series of events which occurred throughout July, August and September 2011, covering the period

between end of June and when the committee received the Performance Report.¹⁵

- 2.21 In its introduction letter to the Performance Report, the Shareholder Ministers stated that initially some information contained within the report may be limited as NBN Co is in the early stages of the NBN rollout. In addition, Shareholder Ministers stated the 'report is consistent with a start up company in the early years of the rollout.'¹⁶
- 2.22 The Shareholder Ministers advised:
- ...the information 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 2012.¹⁷
- 2.23 Further to the information on NBN rollout contained in the Performance Report, at the hearing on 13 October 2011, the NBN Co provided the committee with further updates on the progress of the NBN rollout.¹⁸
- 2.24 Supplementary information was presented in a graphs and maps format and included:
- The NBN Co's progress of the NBN rollout in:
 - ⇒ second release sites;
 - ⇒ progress on the interim satellite service (ISS);
 - ⇒ first release wireless sites; and
 - ⇒ information on new developments.
 - Information about access seeker innovation and changing business models
 - comparative information about bundled pricing between the NBN's 12 Mega bit per second (Mbps) product and the currently available ADSL2+ product and broadband usage.¹⁹

Key Milestones Achieved

- 2.25 Over the period ended 30 June 2011, the key milestones achieved in support of the rollout of the NBN were:
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15 Shareholder Ministers, *Submission 19*.

16 Shareholder Ministers, *Submission 19*, p. 1

17 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 1

18 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, p. 1.

19 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, p. 1.

- 'Execution of mission-critical agreements' with Telstra and Optus.
- 'Securing a funding agreement from the Government covering the anticipated \$27.5 billion equity to be provided by the Government shareholders over time.
- Conclusion of the first major construction contract with Silcar Pty Ltd.
- The first switch-on of the NBN on mainland Australia, in Armidale, NSW.
- First Release Satellite launch.
- Commencement of construction in a further seven Tasmania stage two sites.'²⁰

Key Performance Indicators

- 2.26 The NBN Co Corporate Plan lists a 'number of specific high level deployment targets to be achieved by 30 June 2013' which are stated as incremental year-on-year figures for June 2011, 2012 and 2013, under the two broad categories of:
- premises Passed or Covered; and
 - premises with Active Service.²¹
- 2.27 These two categories are further reported against in three classifications for type of service:
- Fibre-to-the-Premise (FTTP);
 - satellite first release; and
 - wireless.²²
- 2.28 The FTTP product for Brownfields and Greenfields are reported on separately, with a distinction made between Greenfields build and Greenfields Build-Operate-Transfer (BOT).
- 2.29 As stated in the First Report, the NBN Co Corporate Plan provides that the targets are indicative only, as the NBN rollout is dependent on:
- the availability of exchange facilities for the location of the semi-distributed Points of Interconnect (POIs)²³

20 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 1

21 NBN Co, *Corporate Plan 2011-2013*, 17 December 2010, p. 15.

22 NBN Co, *Corporate Plan 2011-2013*, 17 December 2010, p. 15.

- negotiations yet to be finalised on commercially attractive terms for the procurement of Greenfields BOT, and.
 - securing contracts with suppliers and construction contractors on competitive terms and conditions.²⁴
- 2.30 The Performance Report similarly includes the three NBN rollout technologies (fibre, satellite and wireless) with a number of KPIs under each technology to monitor rollout progress. These are:
- FTTP Brownfields with the KPIs for premises passed, premises connected and activated, premises in areas under construction.
 - FTTP Greenfields with the KPIs for total requests received, premises passed, premises connected and activated, premises in areas under construction.
 - First Release Satellite Solution with premises covered, premises connected and activated and uptake.
 - Wireless with premises covered, premises connected and activated, uptake and premises in areas under construction.
- 2.31 A table of the Corporate KPIs appears at the back of the Performance Report and includes data under two main headings:
- Health, Safety and Environment; and
 - Deployment.
- 2.32 These areas are further categorised to reflect information relevant to the NBN rollout in comparison to the NBN Co Corporate Plan target (which is restated where this target exists).²⁵

National Broadband Network Rollout Progress

- 2.33 In the First Report, the committee reported on the figures it had received from NBN Co in relation to the targets outlined in its Corporate Plan. These figures showed that NBN Co had met and exceeded its published

23 The point of connection to the NBN Co access capability for Retail Service Providers and Wholesale Service Providers. 'In the field, this is the physical port on the Ethernet Fanout Switch located at NBN Co's POI, where an Access Seeker connects to establish exchange of traffic with NBN Co's network.' NBN Co, *Corporate Plan 2011-2013*, 17 December 2010, p. 157.

24 NBN Co, *Corporate Plan 2011-2013*, 17 December 2010, p. 16.

25 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, pp 21-23.

- targets for premises passed in Brownfields, and number of premises served through the ISS within the expected timeframe to end June 2011.
- 2.34 The legislation dealing with Telstra and NBN Co's responsibilities for Greenfields has now been passed by the Parliament. There has also been a subsequent change in the Greenfields model, from a supply model to a demand model. The target for lots passed for 2010-11 was revised from the NBN Co Corporate Plan of 45 000 lots passed, to approximately 65 000 lots passed and 40 000 premises connected.²⁶
- 2.35 In an update on the NBN rollout, the NBN Co stated that it was preparing for a volume rollout which would mean passing up to 6000 homes per day at full capacity.²⁷
- 2.36 By September 2011, the NBN Co had also completed construction and testing in the five first-release mainland sites, and launched the ISS.²⁸
- 2.37 In addition to meeting and exceeding the expected June 2011 target of 13 000 FTTP Brownfields with 14 000 premises reached by that date, the NBN Co stated that it had now passed more than 18 000 premises.²⁹ Of the FTTP Brownfields, 622 premises were connected and activated.³⁰
- 2.38 For Greenfields, the NBN Co has exceeded its expected target with 75 000 lots passed.³¹
- 2.39 Earlier in June 2011, NBN Co had awarded a major contract for its fixed wireless project and services were switched on in a number of first release sites, with commercial services for these having begun on 1 October 2011.³²
- 2.40 The NBN Co also provided an update on the construction contracts that it had entered into for the deployment of fibre. The NBN Co stated that while work was well under way in most parts of Australia, contracts for South Australia and the Northern Territory were expected to be finalised 'in the near future'.³³

26 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 5 July 2011, pp 2 and 3; NBN Co, Submission 2.1, pp 1-2.

27 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

28 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

29 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2. The Performance Report states this figure as 18 243 premises passed, p. 22.

30 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2. The Performance Report states this figure as 18 243 premises passed, Shareholder Ministers, Submission 19, p. 22.

31 Shareholder Ministers, Submission 19, p. 5.

32 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

33 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

- 2.41 The NBN Co stated that satellite services were growing fast, with over 2000 end users having registered for the service, and close to 1000 of these services to be either active or awaiting activation by the end of September 2011. The two high capacity satellites which will provide a LTSS are expected to be operational by mid 2015, until which time the ISS is scheduled to operate. The tender process for the space segment of the LTSS was to begin on 6 September, with the ground component tender process expected to be undertaken shortly after this time.³⁴
- 2.42 In regard to progress on fibre deployment in new developments or Greenfields, the NBN Co stated that it had switched on the first NBN Greenfield site of Bunya in Western Sydney. With respect to the laying of fibre in Greenfield sites, the NBN Co stated:
- We estimate that more than 1.9 million new premises will be constructed across Australia during the life of the NBN rollout. As I mentioned, we have received more than 2 200 new development applications for fibre infrastructure nationally. This represents some 176 000 premises. We continue to receive about 50 new applications each week. Simultaneously with Bunya, as part of our new development rollout, we have rolled out fibre in two other new developments in New South Wales and we plan to switch on fibre in new developments in Victoria, Queensland, Western Australia and South Australia this month.³⁵
- 2.43 Following comments made by the NBN Co, the Performance Report provided additional information on the NBN rollout.

Fibre Rollout – First Release Sites

- 2.44 The rollout information in Tables 2.1, 2.2, 2.3 and 2.4 provides an update on how the NBN fibre rollout is progressing across the five first release sites, in Tasmania for stages one and two, and for Greenfields.
- 2.45 Up until and including 30 June 2011, the first release sites had moved into the ‘transition and closure phase’, which includes a ‘post implementation review’ with the aim of examining quality of outcomes and incorporating lessons learned for ‘subsequent projects.’³⁶

34 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

35 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 3.

36 Shareholder Ministers, *Submission 19*, p. 4.

- 2.46 The first customer trials by iiNet, Internode, iPrimus and Telstra commenced in Armidale, NSW on 18 April 2011.³⁷
- 2.47 Twelve access seekers (AAPT, AARNET, Comscentre, Exetel, iiNet, Internode, iPrimus, Nextgen Networks, Optus, Platform Networks, SkyMesh and Telstra) signed up for the end user trials across the mainland first release sites.³⁸

Table 2.1 Fibre-to-the-Premise First Release Sites

First Release Site	Construction Contractor	Date of Construction Contract	Premises Passed (based on current data subject to adjustment)
Armidale	Silcar Pty Ltd	Jul-10	4852
Brunswick	Telstra	Aug-10	3023
Kiama and Minnamurra Downs	Transfield Services	Jul-10	2454
Townsville	Ergon Energy	Jul-10	2773
Willunga	ETSA Utilities	Jul-10	1154
TOTAL			14 256

Source *Performance Report 30 June 2011, Networks*, p. 4.

- 2.48 Table 2.2 shows 3987 premises were passed in the Tasmania stage one FTTP deployment with 761 services delivered to 633 premises, with 604 of these premises active.³⁹
- 2.49 In addition, backhaul links were established between Hobart and both Smithton and Scottsdale and the first multicast service was provided to an end-user.⁴⁰

37 Shareholder Ministers, *Submission 19*, p. 4.

38 Shareholder Ministers, *Submission 19*, p. 7.

39 Shareholder Ministers, *Submission 19*, p. 3.

40 Shareholder Ministers, *Submission 19*, p. 4.

Table 2.2 Fibre-to-the-Premise – Tasmania Stage One

	Number
Services	761
Premises ordered	633
Premises active	604
Premises passed	3987

Source *Performance Report 30 June 2011, Networks, p. 3.*

2.50 Table 2.3 shows construction start dates for locations for the Tasmania Stage Two fibre rollout. The seven Tasmania Stage Two sites include approximately 11 150 homes and businesses. The rolling construction schedule ‘applied in Tasmania Stage Two makes the most efficient use of the workforce given the geographic spread of the locations.’ Depending on the size of site, construction in each site is expected to take between four and six months.⁴¹

Table 2.3 Fibre-to-the-Premise – Tasmania Stage Two

Location	Premises – approx	Construction Start Date (approval of detailed design)
Deloraine	1400	Commenced
George Town	2600	Commenced
Sorell	1500	Commenced
Triabunna	500	Commenced
Kingston Beach	950	Mid October
St Helens	2200	Late October
South Hobart	2000	Late October

Source *Performance Report 30 June 2011, Networks, p. 4.*

2.51 As indicated in Table 2.4, as at 30 June 2011, NBN Co had received approximately 1700 applications from developers for the laying of fibre in new developments, with 1188 active applications covering approximately 75 000 lots, with 403 developer contracts signed. The NBN Co determined

41 Shareholder Ministers, *Submission 19*, p. 4.

that approximately 300 Fibre Access Node (FAN) sites would need to be built and 'connected via leased interim managed backhaul.'⁴²

- 2.52 On 13 May 2011, Fujitsu Australia was appointed as a 'prime partner' to 'manage the design, construction and associated works for the deployment of fibre to new developments.'⁴³

Table 2.4 Fibre-to-the-Premise Greenfields

	Number
Developer applications (approx.)	1700
Active applications	1188
Total lots	75 000
Contracts signed	403

Source *Performance Report 30 June 2011, Networks*, p. 5.

Wireless

- 2.53 On 1 June 2011, NBN Co entered into a contract with Ericsson for the supply and managed services for wireless. The NBN Co also announced that it was planning to complete its fixed wireless service in rural and regional areas by 2015, with the first services available from 2012.⁴⁴
- 2.54 As of 30 June 2011, design for the fixed wireless network had begun, with purchase orders issued for the first three to four clusters or areas.⁴⁵

Satellite

- 2.55 First release contracts with Optus and IPStar were finalised on 6 May 2011 to enable a wholesale ISS (with capability of peak download speeds of up to 6Mbps) to be launched.⁴⁶
- 2.56 At the end of May 2011, the NBN Co released detailed eligibility criteria for rural and remote users of the ISS which would ensure that those with no alternative broadband access would be given priority, subject to a

42 Shareholder Ministers, *Submission 19*, p. 5.

43 Shareholder Ministers, *Submission 19*, p. 6.

44 Shareholder Ministers, *Submission 19*, p. 6.

45 Shareholder Ministers, *Submission 19*, p. 6.

46 Shareholder Ministers, *Submission 19*, p. 6.

service qualification process. A similar qualification used under the outgoing Australian Broadband Guarantee Program would be applied to the ISS qualification process.⁴⁷

- 2.57 In addition, interoperability testing with various providers was completed and evaluation of the LTSS sourcing plan was progressed 'with updated requirement specifications.'⁴⁸
- 2.58 Further discussion on satellite services is included in Chapter 4.

NBN Co Financial Results

- 2.59 The key financial results⁴⁹ summarised in the Performance Report state that operating expenses over the period were \$356 million, which was \$47 million (or around 15 per cent) higher than stated in the NBN Co Corporate Plan of \$309 million. Capital expenses were \$463 million, which was \$957 million (or around 66 per cent) less than stated in the NBN Co Corporate Plan of \$1420 million.⁵⁰
- 2.60 The NBN Co experienced a consolidated operating loss of \$323 million for the twelve months ended 30 June 2011, 'with no operational revenues.' The operating loss was attributed to:
- '\$119 m of employee-related expenses
 - \$161 m for legal and technical advice expenses and
 - \$37 m for IT [information technology] and facilities expenses.'⁵¹
- 2.61 The financial results are attributed to the greater outlay in operating expenditure on a 'change in approach to Greenfields for managed services, and \$8 million of unbudgeted costs associated with the Telstra and Optus transactions.'⁵²

47 Shareholder Ministers, *Submission 19*, p. 6.

48 Shareholder Ministers, *Submission 19*, p. 7.

49 While the Performance Report includes NBN Co's unaudited financial statements for the financial year ended 30 June 2011, the DBCDE stated that the financial statements were checked against the audited financial statements before the Performance Report was provided to the committee. Mr Quinlivan, Transcript of evidence, Canberra, 20 September 2011, p. 5.

50 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 1

51 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 11.

52 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 1

- 2.62 The variance in capital expenditure is mainly attributed to ‘corporate IT systems and operational facilities, and limited investment in the rollout.’ The Performance Report states that ‘this is partly due to the delays in signing the Telstra Definitive Agreement and timeliness selection and evaluation’ of the LTSS.⁵³
- 2.63 In regard to capital expenditure, the Performance Report states:
- Total capital costs incurred over the past twelve months are \$463m with the rollout of the Fibre network amounting to \$85m, and \$118m spent on the Satellite and Wireless solutions, predominantly on the 2.3GHz wireless spectrum. A total of \$198m was spent on Systems and Processes, including Data Centres, National Support and Operations Centre, [Business Support Systems] and [Operational Support Systems].⁵⁴
- 2.64 Following equity injections of \$1050 million, cash flow increased to \$326 million over the previous twelve months. Net assets also increased by \$727 million with the cash component (as stated above) accounting for approximately 45 per cent of the total.⁵⁵
- 2.65 The Performance Report does not include a tax expense for NBN Co as the ‘company expects to be in a tax loss situation for at least the current financial year.’ The Performance Report also states the deferred tax associated with the loss will only be realised in the future ‘when it becomes probable that future taxable profits will allow the tax losses to be utilised subject to loss recoupment rules.’⁵⁶
- 2.66 The Performance Report provided an update of the negotiations and events in regard to the Telstra and Optus Binding Definitive Agreements and an update on the ACCC’s consideration of Telstra’s Structural Separation Undertaking (SSU), the NBN Co’s WBA and SAU. Discussion on these matters is included in Chapter 3 of this report.

53 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 1

54 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 11.

55 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 11.

56 Shareholder Ministers, *Government report to Joint Committee on the National Broadband Network on NBN Co Limited and its subsidiaries as at 30 June 2011*, 23 September 2011, p. 11.

Other Issues

Release of Twelve Month and Three Year NBN Rollout Schedule

- 2.67 On 20 September 2011, the NBN Co advised that it was planning to release a schedule detailing the NBN rollout sites for the next 12 month period with the intention to release a three-year indicative NBN rollout plan early in 2012.⁵⁷
- 2.68 The 12 month NBN rollout schedule was released on 18 October 2011. The 12 month schedule outlined the construction plan for specified areas in jurisdictions across Australia where work on the NBN rollout 'will begin between now and September 2012, as well as where work on the rollout of the network is currently underway.'⁵⁸
- 2.69 The 12-month NBN rollout schedule is expected to be updated quarterly to include additional locations. The NBN Co had indicated that it will 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.'⁵⁹
- 2.70 The NBN Co commented that it was not possible to specify beyond a 12-month period the exact rollout timeframe down to the level of street and premises until detailed design had been undertaken on the ground in an area. However, the NBN Co stated that it would make announcements after it was 'reasonably confident' it had finalised them. The NBN Co also stated that:

What we will probably try and do is announce things as soon as we have reasonably confidently finalised them. As I said, within the next couple of weeks, we will be releasing information on everything that is going to be started within the next 12 months. Then there is a lead time of course until it is finished, so it will be closer to 24 months till all of those sites are completed. So everything that is going to be started in the next 12 months we will release that information. We will then look at everything that is going to be started in the next three years, but the latter two years of that are not as certain. They are indicative – they are our plans at this point in time – but we want to make sure people understand those latter two years are indicative. It is not our

57 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 3.

58 NBN Co, 'NBN Co Releases 12-Month National Rollout Plan', *Media Release*, 18 October 2011, p. 1.

59 NBN Co, 'NBN Co Releases 12-Month National Rollout Plan', *Media Release*, 18 October 2011, p. 1.

intention to try to release the whole 10 years at this point in time, because we simply have not got that far in the planning.⁶⁰

NBN Co Workforce

2.71 The Performance Report outlines the human resource component of the NBN Co. Table 2.5 shows the breakdown of employees across the various branches of the NBN Co as at 30 June 2011, and Table 2.6 shows the breakdown of these employees by jurisdiction.

Table 2.5 NBN Co Staff Resources as at 30 June 2011

Headcount	June 11 Actual
Operations	
Construction	98
Network Operations	224
Technology	182
Commercial Strategy	25
Product Development & Sales	67
TOTAL Operations Staff	596
Sales, General & Administration (S, G & A)	
Network Operations - CIO	124
All Other S, G & A	286
TOTALS, G&A Staff	310
TOTAL Headcount (including Contractors)	906

Source Performance Report 30 June 2011, Resources, People, p. 8.

60 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, pp 2- 3.

Table 2.6 NBN Co Employees by State and Territory as at 30 June 2011

State/Territory	Number of Employees
Australian Capital Territory	3
New South Wales	440
Northern Territory	0
Queensland	22
South Australia	9
Tasmania	5
Victoria	422
Western Australia	5

Source *Performance Report 30 June 2011, Resources, People, p. 8.*

2.72 On 24 August 2011, in preparation for volume rollout of the NBN, NBN Co had undergone a restructure involving changes to senior management. These changes reflected the incorporation of the lessons learned through its detailed planning process during the trial phase of NBN rollout. Of this restructure, the Chief Executive Officer, Mr Mike Quigley stated:

There have been some recent events within the company related to restructure. That happened on 24 August and involved some senior management changes. There has been a lot of media speculation about this, but I want to emphasise that the reason the restructure took place is because NBN Co. has grown from a start-up – literally from nothing – to now having over 1,000 employees in locations across Australia. We have completed testing in a number of areas and have incorporated those lessons into our detailed planning in preparation for volume rollout. Basically, we are entering a new phase of our business and the structure of the company needs to reflect that. The changes that I announced in the restructure were driven by the move from a planning, testing and refining design phase to an implementation and construction phase. We are preparing the company for the rollout across Australia.⁶¹

61 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 2.

2.73 The restructure also included the creation of a new communication unit within the NBN Co which is responsible for arranging information days with towns and areas about the NBN. Mr Mike Quigley stated:

As part of the restructure I did we are putting in place inside the company a unit where that is its job, to go out ahead of the rollout and hold town hall meetings, meetings in local libraries and information days. We are mobilising many councils, universities and other people who are very keen for this rollout to take place. It is quite encouraging to see how many people external to NBN Co. are keen to try to get the message out. We will be leveraging as much of that as we can, so as well as the electronic means we will actually have people with feet on the street talking to local councils, holding town hall meetings and doing similar things.⁶²

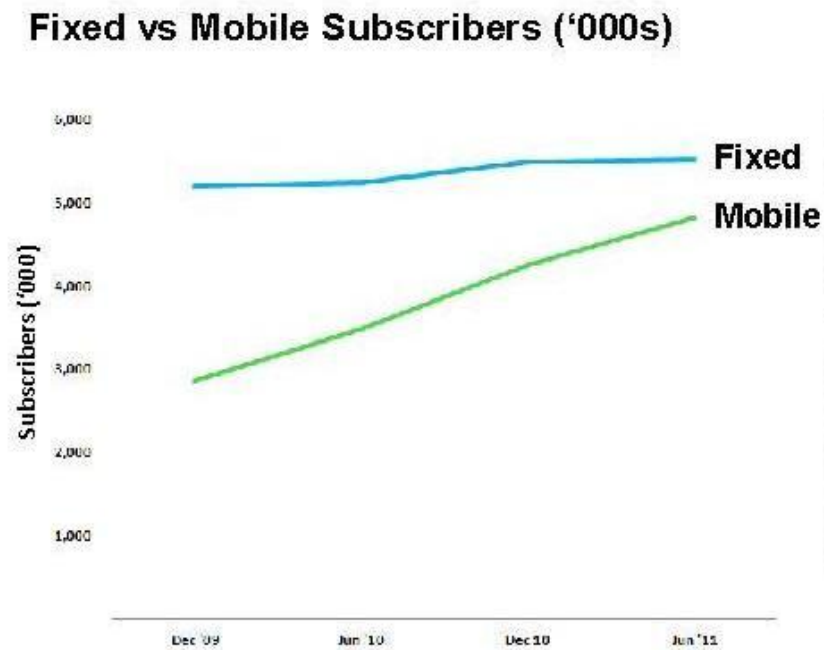
Demand for Wireless

2.74 According to figures by the Australian Bureau of Statistics (ABS), the number of mobile broadband subscribers in Australia is continuing to climb.⁶³ NBN Co found that these ABS results indicate that the number of fixed broadband subscribers is also increasing, but at a much slower rate (Figure 2.1). Yet, the average amount of downloads per month in gigabytes has doubled in the last 12 months for fixed-line networks, whereas on the mobile network the average download for a broadband subscriber has dropped by 20 per cent (Figure 2.2).

62 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 20 September 2011, p. 8.

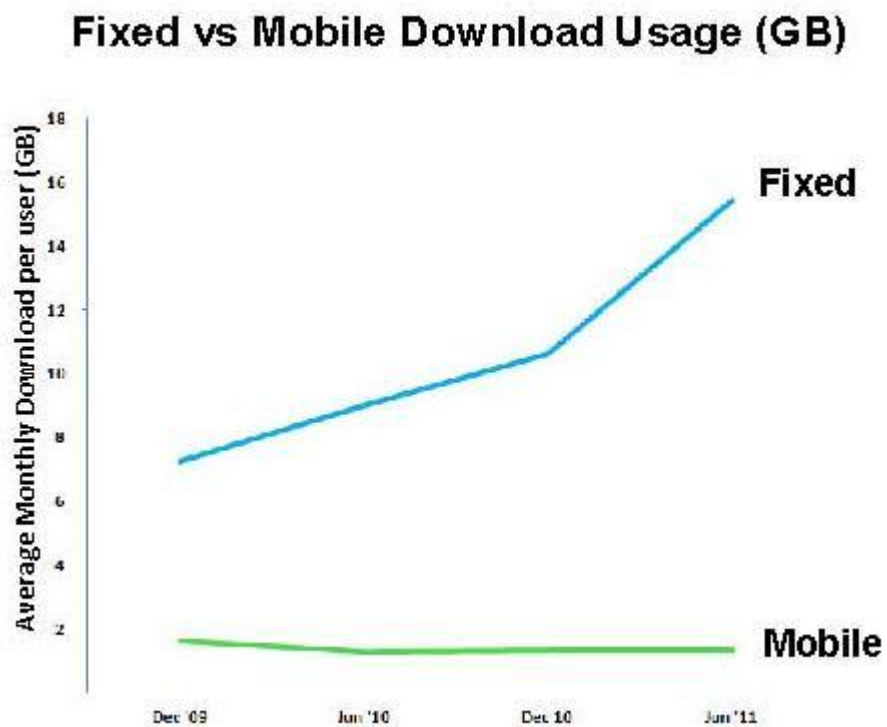
63 Australian Bureau of Statistics, *Report on Australian Internet Activity June 2011*.

Figure 2.7 Rate of fixed broadband and mobile access subscribers



Source NBN Co, Submission 2.4 Attachment 1.

Figure 2.8 Data downloads via fixed networks and mobile access



Source NBN Co, Submission 2.4 Attachment 1.

2.75 This data indicates that increasingly, portable devices such as smart phones and tablets are connecting to fixed-line wireless networks and relying less on networks such as the 3G network. The NBN Co stated that this 'is consistent with what is being seen around the world [and] is a trend we expect will continue'.⁶⁴ Further, Mr Mike Quigley stated:

I was speaking to the folks from Ericsson just the other day and they told me their prediction for 2016. When looking at total worldwide broadband data downloads they expect the amount of traffic on mobile broadband to be one half of one per cent of fixed line network traffic by 2016 ... What that says is what we all expect. We expect the number of connected devices to keep going up very rapidly. In fact in our first release sites we have measured the number of connected devices to be five on average, and Cisco are predicting that to be close to seven or eight on a worldwide basis by 2020. We expect the number of devices to go up, but the heavy lifting of applications other than voice is going to be done on fibre-based networks. We are seeing that same message coming from France Telecom, from operators like Shaw. Juniper Research I think recently estimated that there would be a seven-fold increase in the cost of just trying to keep up with the basic data that is being downloaded on wireless.

2.76 The NBN Co advised that the industry is planning for the demands created by this trend and stated:

There are only two things you can do: you can get more spectrum or you can build more cell sites. Building more cell sites, however, is becoming increasingly difficult in many parts of the world.⁶⁵

2.77 Commenting on the evolution, effectiveness and capacity of fibre and wireless technologies, the NBN Co stated:

[Wireless] technology, as you would expect, continues to evolve and the peak speeds will continue to go up. The issue with wireless technologies is not peak speed. The issue is capacities – how much can you download per subscriber in the busy hour? That is the issue that you have to face when you are looking at wireless technologies and, if you want to get a reasonable amount of download capacity then wireless in fact becomes more expensive than fibre. You cannot do too much with wireless and those sorts of capacities without it becoming very expensive,

64 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, p. 4.

65 Mr Quigley, NBN Co, Transcript of Evidence, Canberra, 13 October 2011, pp 3-4.

which is why the crossover took place between fibre and wireless.⁶⁶

- 2.78 Additionally, the NBN Co commented that wireless has benefits of mobility, whilst fixed line is good for high-capacity downloads. The NBN Co stated that:

Wireless is very good for mobility and fixed line is very good for high-capacity download and video and that is why you need both technologies.⁶⁷

- 2.79 In summation, the NBN will include both wireless technologies and fixed-line fibre. The NBN wireless footprint will use leading next-generation 4G technologies whilst delivering increased capacity under fibre deployments to 97 per cent of Australian premises to meet the increasing demands in the market as indicated by ABS statistics.⁶⁸

Concluding Comments

National Broadband Network Rollout Progress

- 2.80 While the committee expresses its disappointment that the Government's Performance Report was received after its scheduled public hearing on 20 September 2011, it appreciates having received the Performance Report and the list of post closing events. The Corporate KPIs listed at the back of the Performance Report provide a useful snapshot of NBN rollout progress across the three technologies of fibre, satellite and wireless.
- 2.81 The NBN Co advised the committee that it has met and exceeded its targets for fibre and satellite rollout.
- 2.82 The committee understands that the content and size of the Performance Report reflects the early stages of the NBN rollout and that the NBN Co is still in its start-up phase, with employee numbers growing as the company gears up for volume rollout of the NBN. However, the committee was expecting more detailed information about the progress of the NBN rollout in a table format, across the three technologies to enable it to compare results between years.

66 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 24 October 2011, p. 8.

67 Mr Quigley, NBN Co, Transcript of Evidence, Sydney, 24 October 2011, p. 8.

68 Australian Bureau of Statistics, *Report on Australian Internet Activity*, June 2011.

- 2.83 The committee notes NBN Co's financial position as presented in the Performance Report and acknowledges that the NBN rollout is in its start-up phase, is not collecting revenue as yet from Retail Service Providers and so has experienced a consolidated operating loss of \$323 million for the year ended 30 June 2011.
- 2.84 In view of concerns received during the course of the previous review from various groups about the timing for receiving the NBN, the committee welcomes NBN Co's approach to publishing a twelve month NBN rollout schedule and its plan to publish a three year NBN rollout schedule. The committee is of the view that this will provide certainty for the community and industry about the timing and site selection for the NBN rollout.

Development of Key Performance Indicators

- 2.85 The committee met with the NBN Co and the DBCDE in May 2011 and discussed a possible role for it in determining the types of NBN rollout information and KPIs on which it would like further information.
- 2.86 The committee was not formally approached again to provide any comment on the type of content and format for the Performance Report and would welcome such a discussion prior to the receiving the next Performance Report.
- 2.87 The committee will write to Shareholder Ministers during the next review period to ascertain how it can participate in shaping the type of information and format of the next Performance Report to enable it to undertake its role in review of the NBN rollout.

Answers to questions taken on notice

- 2.88 Given the high importance placed on and large investment in the NBN, the committee is again drawing attention to the inability of the DBCDE and the NBN Co to adhere to notified timeframes for the committee's receipt of answers to questions.
- 2.89 As highlighted in the First Report, the committee received answers to questions taken on notice well outside of the notified timeframe. This has been the committee's experience for questions taken on notice by the DBCDE and the NBN Co for the hearings held on and after 13 October 2011.
- 2.90 The committee reiterates the comments it made previously: that adherence to timeframes for receiving answers to questions on notice allows the committee to include relevant formal evidence in its report; and often

provides useful evidence, further informing its findings and recommendations.

- 2.91 In addition, allowing for the fact that the overall planning, development and rollout of the NBN is at an early stage, the committee is concerned about both the quantity and especially the quality of the evidence that it has received in response to questions taken on notice by the DBCDE and the NBN Co. For a number of answers, it seemed that only material that was already available publicly, or evidence already taken at public hearings, was provided.
- 2.92 This approach does not assist the committee to fulfil its role properly and use its time productively. The committee suggests that, where possible, timeframes be reasonably met with information answering in more depth questions placed on notice by members of the committee.

Recommendation 1

- 2.93 **The committee recommends that where possible tables and graphs be used in the Government's Six Monthly National Broadband Rollout Performance Report to enable information to be compared across years.**

Recommendation 2

- 2.94 **The committee recommends 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 providing answers to questions taken on notice where possible on the notified due date or within a reasonable timeframe thereafter.**