## **Chapter 2**

### **Implementation Study**

#### Introduction

- 2.1 In its interim reports, the committee has provided substantial background information and analysis on the Implementation Study. Other than providing a brief overview of the areas already covered, this report will not repeat the committee's previous analysis.
- 2.2 Instead, this chapter will focus on two matters:
  - (a) the general attitude of submitters to the Implementation Study and, in particular, the future of high-speed broadband in Australia; and
  - (b) the consequences flowing from the government's failure to undertake a cost-benefit analysis or release the calculations and detailed workings underpinning the conclusions reached by the Lead Advisor for the Implementation Study. Those consequences are primarily twofold:
    - continued uncertainty over key aspects of the government's NBN project; and
    - an inability of the public to assess whether the government's NBN project is viable, will provide value for money, and deliver sufficient benefits.

### Matters previously addressed in interim reports

- 2.3 In its Third Report, the committee provided the background to the Implementation Study, including details on the process by which a consortium of McKinsey & Co and KPMG was commissioned to be the Lead Advisor and author an Implementation Study.<sup>1</sup>
- 2.4 In its Fourth Report, the committee detailed the events preceding the public release of the Implementation Study, including how the government's delayed release of the Implementation Study compromised the relevance of the document, seemingly resulted in duplicated decision-making and consultation processes, and, in the committee's view, unjustifiably left stakeholders, analysts, and the general public in the dark as to crucial matters concerning the design and implementation of the government's NBN project.<sup>2</sup>

<sup>1</sup> Third Report, November 2009, pp 32–34.

<sup>2</sup> See Fourth Report, May 2010, Chapter 2, pp 7-30.

- 2.5 In addition, chapter 2 of the committee's Fourth Report discussed the limitations of the terms of reference for the Implementation Study (which specifically prevented the Implementation Study from evaluating the merit of the government's policy or undertaking a cost-benefit analysis of the project). As the committee observed, restrictions in the terms of reference prevented the Lead Advisor from providing any analysis whatever of whether the NBN is good policy for Australia or whether it should even proceed.<sup>3</sup>
- 2.6 Finally, chapter 2 of the Fourth Report also outlined the reaction of a number of analysts in the media immediately following the release of the Implementation Study and which strongly questioned underlying assumptions used in the Implementation Study and key conclusions its authors reached.<sup>4</sup>

#### **General response to the Implementation Study**

- 2.7 Submitters were generally in agreement that Australians need super-fast broadband, and that the Implementation Study has not altered their opinions in this respect. For example, the Internet Industry Association 'welcome[d] the release of the Implementation Study' and spoke of the 'fundamental need for Australia to have ... fast ubiquitous broadband'.<sup>5</sup>
- 2.8 Submitters to the committee emphasised the importance of the Implementation Study to the broadband future of Australia. The telecommunications expert, Mr Paul Budde, wrote:

The [Implementation] Study is an extremely comprehensive report on broadband infrastructure in Australia and its release was eagerly awaited both in Australia and overseas.

BuddeComm is aware that the Study is currently being reviewed worldwide, and will also be considered by the ITU/UNESCO Broadband Commission for Digital Development. This underlines the national and international importance and credibility of the Study. To BuddeComm's knowledge, this is the first time that Australia leads the international telecoms world in relation to government policies and business strategies for the deployment of national infrastructure.<sup>6</sup>

2.9 Another independent expert, Mr Michael S Cox, labelled the Implementation Study a 'comprehensive, in-depth and accurate assessment of the problem space', submitting that:

Overall the KPMG/McKinsey NBN Implementation Study reflected a very high quality of analysis and detail in the challenging area of advising the

<sup>3</sup> See Fourth Report, May 2010, pp 7–9.

<sup>4</sup> See Fourth Report, May 2010, pp 13–29.

<sup>5</sup> Internet Industry Association, Submission 130, pp 1, 5.

<sup>6</sup> Mr Paul Budde, Paul Budde Communication Pty Ltd, Submission 128, p. 2.

Government on how best to determine and implement various policies required to support the NBN and NBN Co as well as analysing in depth the potential business case for funding the NBN and achieving an acceptable return on investment.<sup>7</sup>

#### 2.10 Professor Henry Ergas remarked:

I believe that the implementation study is a useful piece of work and in many respects a very careful piece of work. That does not mean that I agree with everything in it, and there is a great deal that one could discuss and argue about. Taking that as given, I think the Implementation Study team has obviously done a very careful piece of work in trying to look at the issues involved in implementing the NBN proposal.8

Mr Allan Asher, Chief Executive Office of the Australian Communications 2.11 Consumer Action Network (ACCAN) explained that ACCAN viewed the Implementation Study as a generally helpful document insofar as it oulines further details of what the government's NBN project will actually involve in terms of practical implementation and operation:

On the whole we think it has filled in a huge number of gaps in our understanding. It has exposed, in a way, the thinking of the models and it has given us for the first time some indications about possible wholesale costs from which one can start to form some views about possible retail prices. There is a lot in there but we also say that there is a lot that is not in there.9

2.12 Some witnesses expressed the view that the Implementation Study had resolved some matters of debate and that it is now time to get on with the job of implementing the government's NBN project, subject to the results of the government's consultation process and the final decisions the government will make in its forthcoming formal response to the Implementation Study. For example, Optus labelled the Implementation Study a 'valuable contribution towards resolving the longstanding debate on many ...issues' and stated that:

[f]or too long Australians have been denied the benefits that a competitive and innovative broadband market can deliver by Telstra's self-serving interest in preserving the status quo. Optus agrees with the [Implementation Study's conclusions that 'the NBN has the power to fundamentally reform the market for all Australians and, more importantly, that this can be done with or without Telstra's participation'. Optus strongly recommends that the government takes on board many of the conclusions and recommendations of the [Implementation Study] to end the debate and get

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<sup>7</sup> Mr Michael S Cox, Submission 139, p. 1.

Professor Henry Ergas, Committee Hansard, Canberra, 4 June 2010, p. 2.

Mr Allan Asher, Chief Executive Officer, Australian Communications Consumer Action 9 Network, Committee Hansard, Sydney, 20 May 2010, p. 4.

on with the job of building a first-class network that will hasten the critical reform that this industry and our sector so desperately need. 10

2.13 Other witnesses expressed greater reservations about the content of the government's NBN project and questioned whether matters of market structure and end-user interests have been sufficiently fleshed out. For example, Ms Rosemary Sinclair, Managing Director of the Australian Telecommunications Users Group stated:

In general terms, when we read the study we see that it is very much focused on the build of those parts of the network that will be built by NBN Co. and not as clearly focused, as we would like, on the long-term interests of end users ongoing—so, for service quality, repair performance and life after the thing is built.

. . .

We think the study focuses on existing industry structure, and we are not sure that it clearly supports the evolution of the sector's structure to a services based innovation and competition model. It focuses on outcomes for the government, in terms of the coverage objectives and outcomes for NBN Co. in terms of the cost, but again not so clearly on outcomes for end users in terms of take-up retail prices and service performance.

We have a question of how we got back up to peak speeds, average speeds, and regulated price increases. We are not at all sure about the wireless bit of the Implementation Study. We have a clear role for NBN in fibre and satellite, and a more complicated position that we are still working through in terms of a tender for the wireless component—the tenderer being able to offer wholesale and retail services.<sup>11</sup>

#### 2.14 Mr Allan Asher of ACCAN stated:

To put it another way, there is no recognition in the Implementation Study that how these first decisions are made about structure and rules is going to determine the shape of this market for 10, 20 or 30 years.

Is it going to go down the path of repeating past errors and leaving us with a small number of large operators with market power—in other words, an oligopoly model? Or are we going to deliberately try and move to a much more open model in which access to the system by competing providers, and hence a wider range of consumer choices, is going to be enshrined? We argue that there is very much a need for a government statement of intent that fills that bit out and that it should not be left to simply negotiations by

<sup>10</sup> Mr Andrew Sheridan, General Manager, Interconnect and Regulation, Optus, *Committee Hansard*, Canberra, 4 June 2010, p. 65.

<sup>11</sup> Ms Rosemary Sinclair, Managing Director, Australian Telecommunications Users Group, *Committee Hansard*, Sydney, 20 May 2010, pp 21–22.

the NBN Co. and the existing major telecoms operators to decide how that would work. 12

#### The importance of a cost-benefit analysis of the NBN

- 2.15 What the NBN is actually going to cost should be a matter of great concern to all Australians and to the government. That this is a cause for legitimate concern is highlighted by one of the most important results to emerge from the Implementation Study.
- 2.16 In April 2009, when the government announced its decision to supercede its election commitment of building a Fibre to the Node national broadband network with a \$43 billion NBN that would see fibre taken to 90 per cent of Australian premises, the Prime Minister stated that the NBN would be 'built in partnership with private sector' investment.<sup>13</sup>
- 2.17 The Implementation Study states that although it is possible the NBN might be built within the initial \$43 billion cost estimate, private sector investors will not be willing to partner the government to build the network. The commercial returns projected by the Implementation Study would be too low to attract such investors.
- 2.18 Professor Jock Given, Professor of Media and Communications at Swinburne University's Institute for Social Research, has written:

[In the Implementation Study, rates] of return come out at 3.6 per cent for low demand, low price, a cost blowout and no sharing of ducts and poles, or 8.3 per cent if it all goes swimmingly. McKinsey and KPMG think 6–7 per cent is a reasonable estimate. When the long-term bond rate is around 6 per cent, that's enough for the government to declare it 'viable' – though it's plainly not for the private sector, from which 'significant investment' was anticipated when the policy was announced a year ago. McKinsey and KPMG deliver this message unflinchingly, though they are only stating what most observers knew from the outset. Despite a lot of talk about spirited investors taking a stake in the country's broadband future and particular companies 'vending in' certain assets in exchange for equity in NBN Co, this is not even close to a commercial proposition given the level of risk.<sup>14</sup>

The Hon. Kevin Rudd, MP, Prime Minister, the Hon Wayne Swan MP, Treasurer, the Hon Lindsay Tanner MP, Finance Minister, and Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'New National Broadband Network', Joint Press Release, 7 April 2009, <a href="https://www.minister.dbcde.gov.au/media/media\_releases/2009/022">www.minister.dbcde.gov.au/media/media\_releases/2009/022</a> (accessed 9 June 2010).

Mr Allan Asher, Chief Executive Officer, Australian Communications Consumer Action Network, *Committee Hansard*, Sydney, 20 May 2010, pp 3–4.

Professor Jock Given, 'Inside Conroy's Implement', *Inside Story: Current affairs and culture*, <a href="http://inside.org.au/inside-conroys-implement/">http://inside.org.au/inside-conroys-implement/</a>, 16 May 2010 (accessed 9 June 2010).

2.19 Mr Kevin Morgan, an independent analyst, submitted to the committee that the Implementation Study's findings on the commercial viability of the NBN project have led to the government quietly moving the goalposts on what it means to say that the NBN is commercially viable:

[I]f nothing else the study puts the lie to the initial announcement by the Prime Minister in April of last year that the NBN would be effectively a Public Private Partnership and would attract private sector equity whilst it was being built. That implied the NBN could be justified on commercial grounds. Faced with the obvious finding of the Study that the NBN investment could never be deemed to be a commercial undertaking the government's rhetoric on the NBN has now changed.

The NBN is now justified by the economy wide benefits it will bring, externalities that cannot be captured on its balance sheet. Regrettably, in the absence of a cost benefit study, we don't know what those benefits are or whether the ability to currently capture the externalities of higher speed broadband are a function of inadequate infrastructure i.e. low speeds and insufficient network capacity or the lack of applications. In essence the NBN has become the answer to an as yet unidentified problem.<sup>15</sup>

- 2.20 A rigorous cost-benefit analysis would have required the government to do three things:
- cost its NBN project, including laying bare for public critique the assumptions and calculations underpinning its costings;
- comprehensively state and justify the benefits believed to flow from its NBN project; and
- comprehensively plan the design and operating arrangements of the proposed NBN so that it would be able to be costed and the outcomes from its operation be identified and evaluated.
- 2.21 A cost-benefit analysis for the NBN would also have required consideration of the reasonable commercial rates of return and cash flows for the NBN Co, taking into account the NBN Co's costs of equity and debt and the risk profile of both NBN Co and the market in which it operates.
- 2.22 Undertaking a cost-benefit analysis would have enabled the public to properly assess for themselves whether the government's NBN project represents value for their money and is the best policy for delivering adequate and affordable broadband services to Australian premises. Central to that analysis would have been a comprehensive articulation of what the government's NBN project actually entails as opposed to a high-level sketch unsupported by details on network architecture, roll-out timetables, rural and regional service availability and pricing.

<sup>15</sup> Mr Kevin Morgan, Submission 133iii, pp 1–2.

2.23 The matter is not a mere theoretical one. Dr Ian Martin, in an article published in the *Telecommunications Journal of Australia* and provided to the committee as additional information, identified the practical and significant consequences which will result if there is 'a large potential gap between the productivity claim behind the NBN and its likely cost benefit outcome'. Dr Martin wrote:

[W]here will the shortfall be made up? Four possibilities to make up the financial shortfall are:

- the federal budget,
- NBN access prices (and therefore access seekers' earnings),
- higher retail prices (to the extent access price increases may be passed on), and
- Telstra shareholders through the transfer of value from Telstra to NBN Co. 16

#### No cost-benefit analysis conducted

- 2.24 As is well-known, at no stage has the government undertaken a rigorous, public cost-benefit analysis of its NBN project. The Implementation Study explicitly did not conduct this analysis.
- 2.25 The Department of Broadband, Communications and the Digital Economy explained to the committee that the Lead Advisor for the Implementation Study was specifically not directed to undertake a cost-benefit analysis because such analysis was seen as superfluous given that the government had made an election commitment to build the NBN regardless of what a cost-benefit analysis might conclude:

Senator FISHER—Why wasn't McKinsey asked to provide a cost-benefit analysis?

Mr Quinlivan—Because the government had made a policy decision already. The purpose of the cost-benefit analysis is to determine whether there is a case for doing something or not... But the government had made that decision. It was an election commitment. So the practical issue was to work out how best to implement it, and that was the subject of the implementation study. By its very nature it is an implementation study. <sup>17</sup>

- 2.26 A number of submitters commented on whether it is still important that a costbenefit analysis be conducted for the government's NBN project.
- 2.27 The Business Council of Australia maintained its position that a cost-benefit analysis is needed:

Dr Ian Martin, 'The promised land: Costs and benefits of the NBN vision', *Telecommunications Journal of Australia*, vol. 60, no. 2, p. 30.15.

<sup>17</sup> Mr Daryl Quinlivan, Deputy Secretary, Department of Broadband, Communications and the Digital Economy, *Committee Hansard*, Canberra, 20 May 2010, p. 67.

The findings of the NBN implementation study confirm the need for a supporting cost–benefit analysis of the \$43 billion National Broadband Network to demonstrate that the project is in the national interest.<sup>18</sup>

2.28 Doctor Mark Harrison, an economist and recent visiting researcher at the Productivity Commission, also stated that a cost-benefit analysis is still needed:

Usually, when you undertake a project in the private or the public sector, you want to know: is there a net benefit? Do the benefits exceed the cost? If it is so obvious, that should be very easy to show in a cost-benefit analysis. I am saying [the government] have presumed the results of the analysis that has not been done.<sup>19</sup>

[Whether the government's NBN project is a good thing for Australia] is exactly what should be tested in the cost-benefit study. That is the point; you can say that, but showing it is another thing. The question is: let us try to get estimates of these benefits and see whether they do justify the cost. The cost should be properly measured, which includes the cost of capital and which includes the cost of risks imposed on taxpayers; then you can weigh them up. In essence [the government] claim they know the results of the cost-benefit study without ever doing it.<sup>20</sup>

2.29 Professor Henry Ergas similarly submitted that there is a public policy imperative that a cost-benefit analysis be undertaken, especially in the wake of the analysis undertaken and conclusions reached in the Implementation Study:

There are a wide range of uncertainties that are involved and I think the [Implementation Study] is quite frank in its recognition of those uncertainties. But they have put an enormous amount of effort into trying to get that right. It seems to me that it would be an enormous shame and a departure from good public policy for all of that work to be excluded from informing a proper cost-benefit appraisal. It would be an enormous waste of the \$25 million or \$27 million that taxpayers have paid for this study.<sup>21</sup>

2.30 Professor Paul Kerin argued that the government should only proceed with the NBN project:

if the business case and the cost-benefit analysis stack up. I should firstly distinguish between a business case and a cost-benefit analysis. The Implementation Study did a business case, which really looks at the financial cash inflows and outflows associated with the NBN. That is one issue. The bigger issue for me is the cost-benefit analysis ... because we have to look at the benefits of doing this project and also the costs. The benefits should include all the benefits to society through faster broadband, cheaper broadband or greater availability and so on. Yes, there may well be

Business Council of Australia, Submission 136ii, p. 4.

<sup>19</sup> Dr Mark Harrison, *Committee Hansard*, Canberra, 4 June 2010, p. 9.

<sup>20</sup> Dr Mark Harrison, Committee Hansard, Canberra, 4 June 2010, p. 8.

<sup>21</sup> Professor Henry Ergas, *Committee Hansard*, Canberra, 4 June 2010, p. 16.

benefits from this project. No-one has looked at whether those benefits exceed the cost of the project—\$43 billion.<sup>22</sup>

. . .

The cost to society is \$43 billion. The benefits [asserted] are talking about vision, and how everyone wants high-speed networks that work, [but] quoting a couple of studies is not the sort of rigour that is required when we are spending \$43 billion of taxpayers' money, six times as big as the highest previous figures ever for an infrastructure project.<sup>23</sup>

2.31 Professor Kerin went on to explain his view that, in the absence of the government conducting a cost-benefit analysis, it is

difficult to know, firstly, whether there should be an investment at all by anyone and, secondly, whether the government should do it. I would certainly say that, if a project generates benefits to society that cannot be captured by a commercial business, I am all for the government investing in that project, because the benefits to society may well outweigh the costs. But what we should do is look at what those benefits are and what those costs are rather than understating the cost of the project and not quantifying what the benefits are.<sup>24</sup>

2.32 On the other hand, Professor Reg Coutts expressed a degree of scepticism about whether a cost-benefit analysis would provide much insight:

On one level, with respect to a discussion about cost-benefit, a broad study would be very helpful, as long as it is helpful in terms of an informed debate rather than an exchange of competitive press releases. In broad terms, yes [there is a need for the government to do a cost-benefit analysis]. The difficulty is that there have been a number of studies in respect of broadband as such and the economic benefits, but it is unclear about particularly the benefits and, to some degree, even the costs of a ubiquitous broadband network. This is what makes it a very contentious issue, because it really does come down to looking at what else is happening and what other countries are doing around the world and a judgment of how the future is going to unfold. I do not mean to be deprecating to my economist colleagues, but they have never filled me with confidence with their ability to predict what is happening next year, let alone in the next five to ten years.<sup>25</sup>

2.33 Further, the Australian Competition and Consumer Commission (ACCC) submitted that if the NBN is to be implemented, the issues relevant to its regulatory assessment of NBN Co's activities and operations will require a cost-benefit analysis of the effect of conduct on competition which is an analysis of a different kind to that

<sup>22</sup> Professor Paul Kerin, *Committee Hansard*, Canberra, 4 June 2010, pp 29–30.

<sup>23</sup> Professor Paul Kerin, *Committee Hansard*, Canberra, 4 June 2010, p. 32.

<sup>24</sup> Professor Paul Kerin, *Committee Hansard*, Canberra, 4 June 2010, p. 36.

<sup>25</sup> Professor Reg Coutts, *Committee Hansard*, Canberra, 4 June 2010, p. 26.

which might be used by economists attempting to assess the government's NBN project pursuant to economic cost-benefit models:

[T]he costs that [the ACCC] look at are the costs to competition rather than the benefits to the public interest. It is off a little bit to the side and above a pure cost-benefit analysis. Pure cost-benefit analysis would miss a lot of the qualitative public issues. A cost-benefit analysis would miss the 'with and without' test. It could be a bit misleading in terms of the competition analysis.<sup>26</sup>

#### Committee view

- 2.34 The committee's interim reports have continually expressed the committee's frustration that the government's NBN project is being implemented in breach of the government's own guidelines for assessing whether infrastructure projects of national significance should proceed.
- 2.35 In its Third Report the committee explained how the failure to conduct an 'accurate and justifiable Cost-Benefit Analysis' breaches the agency guidelines of Infrastructure Australia, as well as the principles and criteria of the Building Australia Fund (BAF) evaluation processes. The BAF processes, including the undertaking of a rigorous cost-benefit analysis, are made mandatory by s 52(2) of the *Nation-Building Funds Act 2008*. As the committee wrote over six months ago:

The committee is appalled that ... almost eight months after the announcement of this commitment to a massive investment of \$43 billion for the FTTP NBN, the government still refuses to comply with its own legislative requirements that the NBN must undergo a rigorous cost-benefit analysis. <sup>28</sup>

#### 2.36 In its Fourth Report the committee stated:

In the absence of a cost-benefit analysis proving to the contrary, the committee believes the NBN is not justifiable policy. Too much public money is at stake to be thrown away without transparent, accountable, independent assessment of the merit of starting, let alone progressing, the project.

All in all the committee does not accept that the Implementation Study, nor other evidence given to the committee, supports the NBN in its current form.<sup>29</sup>

Mr Mark Pearson, Australian Competition and Consumer Commission, *Committee Hansard*, Canberra, 4 June 2010, p. 50.

<sup>27</sup> Third Report, November 2009, pp 64-66.

<sup>28</sup> Third Report, November 2009, p. 66, [6.18].

<sup>29</sup> Fourth Report, May 2010, p. 8 [2.10] – [2.11].

2.37 The committee repeats its view that the Implementation Study is not a substitute for a rigorous cost-benefit analysis being conducted into the government's NBN project, and that the lack of such an analysis remains a significant barrier to being able to assess whether the project will provide value for taxpayers' money.

#### No certainty on key aspect of the NBN project

- 2.38 The Implementation Study provides advice to the Government. It makes 84 recommendations, and many other statements (titled 'Advice') of 'significant counsel to the NBN Co Board'<sup>30</sup> on matters relating to the technology, financing, ownership, policy framework, and market structure arrangements for the government's NBN project.
- 2.39 The recommendations and counsel to NBN Co Board provided by the Implementation Study reflect the Lead Advisor's view on how the government's policy objectives 'can be implemented over time'; <sup>31</sup> they do not necessarily reflect what the government, NBN Co or any other party will actually decide to do when the NBN is implemented on the ground.
- 2.40 Evidence to the committee indicated witnesses' general agreement that the Implementation Study is an important document and that it is comprehensive in identifying what are or may be key issues if the government's NBN project is implemented. The evidence on that point was extracted above.
- 2.41 Evidence to the committee also indicated that there are a number of topics, many of which are canvassed in, but not resolved by, the Implementation Study, for which uncertainty remains. These are matters relating to key aspects of the NBN project's design, operating arrangements, and regulatory framework. The evidence indicated that decisions made on each of these aspects will ultimately affect whether the government's NBN project achieves the policy benefits the government has continually stated (but not proved) as justifying the cost of building the NBN.
- 2.42 Some of the key areas of uncertainty or concern identified were:
  - services for the final 7-10 per cent;
  - future of the Universal Service Obligation;
  - end-user interests, including complaints handling, end-user premises equipment, Quality of Service, migration arrangements and pricing; and
  - framework for future privatisation of NBN Co.

<sup>30</sup> McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. v.

<sup>31</sup> McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. i.

#### Services for the final 7-10 per cent

- The Implementation Study recommends that the fibre component of the NBN 2.43 should be extended to 93 per cent of premises and cover the 1.3 million new premises expected to be built by 2017-18.<sup>32</sup> It also recommends that the government conduct a commercial tender process for the provision of fixed-wireless network to provide 12 Mbps peak (as opposed to 'committed' or 'average') data rates for premises within the 94<sup>th</sup> to 97<sup>th</sup> percentiles,<sup>33</sup> and that NBN Co be required to provide a next-generation satellite service providing at least 12 Mbps peak data rates for premises beyond the fibre footprint.<sup>34</sup>
- 2.44 Finally, the Implementation Study provided significant counsel to government that NBN Co should also be required to provide transit backhaul to existing towers and new tower sites needed by the fixed-wireless network operator. <sup>35</sup> The significance of backhaul for wireless services is twofold. First, that 'whereas base stations in metropolitan areas frequently connect via fibre links, most towers in the final 10 per cent connect via microwave backhaul, which offers lower capacity and performance characteristics', and moreover, 'market prices for backhaul capacity remain very high in regional and remote areas'.<sup>36</sup>
- A number of submitters commented on these recommendations and matters relating to service delivery for regional, remote, and currently under-serviced premises.
- The Regional Telecommunications Independent Review Committee, chaired 2.46 by Dr William Glasson AO, stated that it:

Questions the proposal for a tender to construct and operate a wireless network with top speeds of 12 Mbps for the 94<sup>th</sup> to 97<sup>th</sup> percentiles. According to the Committee's understanding of existing infrastructure, this proposal duplicates a number of fixed and wireless platforms that already offer similar, or greater, top speeds. Given that the Study recommends the wireless network should not be required to operate as a wholesale-only network the benefits to regional Australians of this proposal require further explanation.

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<sup>32</sup> McKinsey-KPMG, Implementation Study for the National Broadband Network, 5 March 2010, p. 10.

<sup>33</sup> McKinsey-KPMG, Implementation Study for the National Broadband Network, 5 March 2010, p. 281, recommendation 45.

<sup>34</sup> McKinsey-KPMG, Implementation Study for the National Broadband Network, 5 March 2010, p. 293, recommendation 43.

<sup>35</sup> McKinsey-KPMG, Implementation Study for the National Broadband Network, 5 March 2010, p. 317, recommendation 47.

McKinsey-KPMG, Implementation Study for the National Broadband Network, 5 March 2010, 36 p. 317.

While recognising that the geographic size and population density of regional Australia means that it is not viable to deploy identical technologies to all Australians, any differences should be minimised. Accordingly, the Committee would like to better understand the potential implications of recommendations relating to differences in services and pricing structures between the NBN platforms.<sup>37</sup>

2.47 In contrast, Professor Reg Coutts expressed enthusiasm for the conclusions of the Implementation Study in terms of its wireless solutions:

Again, it was only a start, but I was gratified to see in the [Implementation Study] the significant focus on the role of backhaul in a number of ways. It was not just about providing a competitive backhaul to the points of interconnect but also providing backhaul, for example, to fixed wireless providers, and also mentioning the importance of backhaul even for the satellite side. Because of the nature of the industry structure to date, the focus of the industry has been on the highly urbanised centres of Australia, as you are well aware. So I was very gratified to see in the Implementation Study a significant emphasis and quite a hefty proposed budget allocation against backhaul. So, firstly, backhaul to me is crucial to the NBN as a whole, but particularly for regional and remote communications competitive backhaul is an absolutely key.<sup>38</sup>

2.48 However, Professor Coutts identified that the competitive backhaul arrangements will still involve 'a number of challenging issues'. Professor Coutts expressed the view that many key issues for regional Australia and those premises located in the last 10 per cent have been insufficiently addressed given that the government has already commenced rolling out the network:

Senator FISHER—I hear you saying that, in terms of a credible NBN looking after the last 10 per cent, you are not yet prepared to pin your hopes on the implementation study.

Prof. Coutts—I am a bit of an optimist, as you probably know, so I am hopeful with the things I see and hear are happening—not at the pace that I would like. But, there again, I recognise the size of the task. I come back to the original statement. I think that, until the government really is clear how it is going to address that 10 per cent and who the 10 per cent are, the plan, shall we say, is not complete in the same way that the optical footprint—

Senator FISHER—Who are the 10 per cent? What will they get? When will they get it? How will they get it? How much will it cost them? Are they the questions that need answering?

Prof. Coutts—And probably a few more from there. We are just over one year into a more than eight-year program. My focus is that I and the people

<sup>37</sup> Regional Telecommunications Independent Review Committee, Submission 135ii, p. 3.

<sup>38</sup> Professor Reg Coutts, *Committee Hansard*, Canberra, 4 June 2010, p. 22.

who talk to me from regional communities would like to see when broadband is comin' to town, so to speak.<sup>39</sup>

#### Future of the Universal Service Obligation

2.49 The Universal Service Obligation (USO) is an obligation placed on universal service providers to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business. Telstra is currently the sole universal service provider by virtue of its ownership of the ubiquitous copper network. The Implementation Study explains that Telstra currently fulfils its USO:

with long copper loops, except for around 20,000 premises where fixed radio solutions are deployed, and an even smaller number where voice is delivered via satellite.<sup>40</sup>

- 2.50 The Implementation Study explained how a wholesale-only NBN Co will differ from the vertically-integrated Telstra and that, because network services will be separated from retail services over the NBN, 'Treatment of the USO will need to be re-examined in the context of such a market evolution...[but] some form of retail voice USO will need to be retained even after completion of the NBN'. The Implementation Study concluded that a 'detailed examination of [the USO] topic is beyond the scope of the Implementation Study' but nevertheless identified several options the government may wish to consider in the coming period. 42
- 2.51 In its Fourth Report the committee identified the significant concerns already expressed to it about the future of the USO and calls, particularly from consumer groups, that the USO be addressed and a minimum retail service obligation also be developed.<sup>43</sup>
- 2.52 During the committee's most recent further hearings, the USO continued to be a matter of significant concern for submitters. The Internet Society of Australia, the Australian Communications Consumer Action Network (ACCAN), and Mr Michael Cox all identified the matter as being critical, and one for which there is currently no certainty for the public or stakeholders.<sup>44</sup>

Internet Society of Australia, *Submission 140*, p. 4; Australian Communications and Consumer Action Network, *Submission 138ii*, pp 5–7; Mr Michael S Cox, *Submission 139*, p. 17.

<sup>39</sup> Professor Reg Coutts, *Committee Hansard*, Canberra, 4 June 2010, p. 25.

<sup>40</sup> McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 119.

<sup>41</sup> McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 120.

<sup>42</sup> See McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 120, Exhibit 2-21.

<sup>43</sup> Fourth Report, May 2010, pp 104–106.

2.53 Mr Karl Hampton MLA, Minister for Information, Communications and Technology Policy for the Northern Territory Government submitted that the matter is particularly urgent for premises located in the NT:

While supporting recommendation 30 to determine how the Universal Service Obligation may apply to NBN Co, I don't believe it can wait until the end of 2011. As you are aware there are substantial parts of the Northern Territory that rely on the cross subsidisation inherent in the Universal Service Obligation and the comfort that is brought to consumers by the Customer Service Guarantee.

Whilst I understand the proposed legislation strengthens the Universal Service Obligation requirements on Telstra, I believe there is a need for further discussion with a broad audience as to how the Universal Service Obligation and Customer Service Guarantee will apply once the National Broadband Network has a presence. Market failure for equivalent services is an issue for remote areas for many years to come and it is my view that the Northern Territory will require access to the Universal Service Obligation and Customer Service Guarantee for some time to come.<sup>45</sup>

# End-user interests: complaints handling, end-user premises equipment, Quality of Service, migration arrangements and pricing

- 2.54 A number of submitters made comments about matters relating to end-users that are yet to be finally determined. The resolution of each of these issues will impact on the extent to which the NBN-as-implemented will actually realise benefits for end-users. Particular topics addressed by submitters included:
- Complaints-handling arrangements, specifically the need for clear delineation of NBN Co and Retail Service Providers' responsibilities for handling customer complaints and service failures;<sup>46</sup>
- Capabilities of equipment located at end-user premises, specifically whether the Optical Network Terminal boxes (ONTs) at each end-user's premises will have a sufficient number of physical ports to enable multiple providers to offer services to each premises,<sup>47</sup> and also the arrangements for back-up batteries to be fitted for ONTs:<sup>48</sup>

Australian Competition and Consumer Action Network, *Submission 138ii*, 'Response to NBN Implementation Study', p. 3.

Australian Competition and Consumer Action Network, Submission 138ii, 'Response to NBN Implementation Study', p. 6; Mr Karl Hampton MLA, Minister for Information, Communications and Technology Policy, Northern Territory Government, Submission 132, p. 1.

Mr Karl Hampton MLA, Minister for Information, Communications and Technology Policy, Northern Territory Government, *Submission 132*, p. 2.

<sup>48</sup> Australian Competition and Consumer Action Network, *Submission 138ii*, 'Response to NBN Implementation Study', pp 7–8.

- Quality of Service (QoS) matters, <sup>49</sup> specifically what standards will apply and what will be the mechanisms for ensuring that services over the NBN have sufficient QoS to support the bandwidth-hungry requirements of advanced services such as IPTV, <sup>50</sup> Video on Demand, <sup>51</sup> and VoIP; <sup>52</sup>
- Aerial versus underground cabling,<sup>53</sup> specifically the assumption used in the Implementation Study's cost modelling that 55 per cent of the NBN should be deployed using aerial cabling and infrastructure;<sup>54</sup>
- The roll-out timetable for the NBN across the country<sup>55</sup> and the nature of arrangements to ensure smooth transition experiences for end-users.<sup>56</sup> Individual submitters emphasised in particular that currently under-serviced premises should be prioritised for the receipt of NBN-broadband services and expressed dissatisfaction that this was not sufficiently addressed in the Implementation Study;<sup>57</sup> and
- Pricing arrangements, including the viability and desirability of discriminatorily pricing services higher for business as opposed to residential premises, and pricing and service arrangements for government and government-owned networks.<sup>58</sup>

49 Mr Michael S Cox, Submission 139, p. 2–3; Internet Society of Australia, Submission 140, p. 3.

- Mr Karl Hampton MLA, Minister for Information, Communications and Technology Policy, Northern Territory Government, *Submission 132*, p. 3; Mr Michael S Cox, *Submission 139*, p. 16.
- Australian Competition and Consumer Action Network, *Submission 138ii*, 'Response to NBN Implementation Study', p. 6.
- 57 Professor Reg Coutts, *Committee Hansard*, Canberra, 4 June 2010, p. 25; Mr Karl Hampton MLA, Minister for Information, Communications and Technology Policy, Northern Territory Government, *Submission 132*, p. 3; Mr Michael S Cox, *Submission 139*, p. 16.
- 58 Mr Michael S Cox, Submission 139, p. 12; Dr Ross Kelso, Submission 137ii, p. 5.

Internet Protocol Television is television content that, instead of being delivered through traditional broadcast and cable formats, is received by the viewer through the technologies used for computer networks.

A system that allows users to select and watch or listen to video or audio content on demand.

Voice over Internet Protocol is a protocol optimised for the transmission of voice through the internet.

<sup>53</sup> Internet Society of Australia, Submission 140, p. 3.

McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 214.

#### Framework for future privatisation

- 2.55 Whether the NBN Co should be privatised in the future has been a matter previously addressed by members of the committee in the committee's interim reports.<sup>59</sup>
- 2.56 The framework for privatisation, including the safeguards built into the model, are integral to the question of whether the government's NBN project is in the national interest and will actually provide value for money.
- 2.57 Presently there is still uncertainty about what the framework for privatisation and the arrangements to govern that process will look like: final decisions have not yet been made.
- 2.58 The Implementation Study recommends that it is vital that a review into market structure and competition safeguards be conducted prior to any privatisation of NBN Co, that it may be that NBN Co should be split into a Layer 1 business (the ducts, poles and physical fibre) to be privatised separately from a Layer 2 business (the active equipment that lights the fibre), and that NBN Co's backhaul assets may be better kept under public ownership for good and not privatised at all:

In the lead-up to privatisation, Government should seek independent advice about the competition safeguards that need to be in place to privatise NBN Co, and what form that privatisation should take from a competition perspective. The independent advice could reasonably be that strict equivalence is insufficient to safeguard competition once NBN Co is in private hands, and that the Layer 1 business (the ducts, poles and physical fibre) should be privatised separately to the Layer 2 business (the active equipment that lights the fibre). However, telecommunications is a dynamic industry and committing to an inquiry by an independent agency such as the Productivity Commission prior to privatisation would avoid locking in a particular solution today.

The situation for backhaul assets is different—uncontested backhaul will remain a bottleneck asset that is very difficult to regulate. Volume will be constantly increasing thus requiring upgrades in active equipment to increase data throughput, without being able to raise prices sufficiently to achieve economic returns. Stand-alone commerciality of backhaul will always be challenging while ensuring affordability, so a commercial owner will rationally under-invest. Government should therefore have a bias not to privatise NBN Co's backhaul assets, although it could allow private operators (including a privatised NBN Co) to tender for their operations. The independent review into competition prior to privatisation should start with a rebuttable presumption to keep backhaul under public ownership. <sup>60</sup>

Fourth Report, May 2010, pp 89–95. See also: Fourth Report, May 2010, Additional comments of Australian Greens, p. 146.

<sup>60</sup> McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 53.

2.59 The Implementation Study also recognised that privatisation arrangements should be established in advance of implementation as opposed to being created on-the-run:

privatisation safeguards should be set today in the NBN legislation. This will make it more difficult to undermine competition outcomes in the future by seeking to maximise privatisation proceeds—and therefore will be an important component in safeguarding the NBN's competition legacy.<sup>61</sup>

2.60 Submitters emphasised the importance of privatisation arrangements to the viability and desirability of the government's NBN project. The Regional Telecommunications Independent Review Committee submitted:

Given the importance of developing competition in regional, rural and remote Australia, the Committee agrees that an independent review into market structure and competition safeguards prior to any privatisation of NBN Co is vital. The review should include consideration of impacts in rural, regional and remote Australia as part of its terms of reference.<sup>62</sup>

2.61 Optus also commented on privatisation arrangements:

[B]efore there is ultimately a government sell-down of its interest in the National Broadband Network, we think it would be appropriate to have a look at the competitive environment at that point in time. We have reached that conclusion because of the unique nature of this network. It will be the owner and operator of a bottleneck infrastructure. Therefore we think that it is important to have a look at the competition implications of any sell-down before that occurs. I think we have probably gone a little bit further and said that we think some of the competition issues are so critical that there should be some limits imposed in terms of retail telecommunications providers taking a stake in the National Broadband Network on privatisation. We have certainly supported the study's recommendation for a 15 per cent equity cap on retail telecommunications investment in the National Broadband Network Company. 63

2.62 The Australian Telecommunications Users Group submitted:

Our thinking about [privatising NBN Co and the timetable for privatisation] is modelled on history. We like the Implementation Study's recommendation that there be a public inquiry at that time to determine whether in fact that is the best thing to do. We would like the criteria to be the long-term interests of end users. We are a bit of a broken record on that particular point...

62 Regional Telecommunications Independent Review Committee, Submission 135ii, p. 3.

63 Mr Andrew Sheridan, General Manager, Interconnect and Regulation, Optus, *Committee Hansard*, Canberra, 4 June 2010, pp 69–70.

McKinsey-KPMG, *Implementation Study for the National Broadband Network*, 5 March 2010, p. 53.

The other interesting thing ... is this notion that you might structurally separate NBN Co before you sell it, assuming that it has got into active service delivery in competition with other people. I thought that was quite interesting. I think we are comfortable with the caution that has come out of the study [on this] particular issue. Rather than just do it, we think about it and then maybe do it.<sup>64</sup>

#### Committee view

- 2.63 The committee is of the view that many of the issues identified above will have a serious impact on the government and NBN Co's ability to implement the NBN project on time and to budget, and just as importantly, on whether the NBN project will achieve the benefits the government has mooted as justification for it.
- 2.64 The committee believes that the detail of the operating arrangements, network design, and regulatory matters should have been determined prior to implementation of the NBN commencing. As it is, the NBN has been substantially rolled-out in Tasmania, retail services have recently commenced there, and yet there is still no resolution of issues as important as the future of the Universal Service Obligation, the complaints handling mechanism that will apply and when and what type of broadband services are going to 'come to town' for Australian premises located on the mainland.
- 2.65 The 2010-2011 Budget allocated \$16 million over two years to the Department for a national advertising campaign focused on 'raising public awareness of the value of super-fast broadband which will be delivered to Australian households, businesses and organisations through the rollout of the NBN'. The committee questions how the value of the NBN can be quantified or even proclaimed in the absence of a cost-benefit analysis or the details of the NBN actually being finalised. The NBN is a government project yet to receive the endorsement of Parliament. Since the government announced its Fibre to the Premises NBN project, no Bill relating to the governing, operating, and regulatory arrangements for the NBN Co, nor any Bill relating to the future of Telstra and its assets, has been agreed to by the Senate.
- 2.66 It is not possible to make an assessment of whether the government's NBN project will be a policy success because too much of the most important detail of the network's design and future operating arrangements remains outstanding. There is no detail, and no demonstrated proof (as opposed to untested assertion) of value for money. The Australian public simply has not been given the means to test for themselves whether the government's NBN project is good policy for Australia.

Ms Rosemary Sinclair, Managing Director, Australian Telecommunications Users Group, *Committee Hansard*, Sydney, 20 May 2010, pp 23–24.

65 Australian Government, *Budget measures: budget paper no. 2: 2010-2011*, Commonwealth of Australia, Canberra, 2010, pp. 117-118.

#### Information needs to be put in the public domain

2.67 The government has stated, based on the conclusions of the Implementation Study, that the NBN can be built for a total cost in the order of some \$43 billion and that there will be social, economic and policy benefits realised by building the NBN. When releasing the Implementation Study to the public, the Hon Senator Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, stated:

After months of detailed and rigorous analysis, the Implementation Study confirms that the Government's National Broadband Network is achievable, viable and will transform life and business in Australia. 66

- 2.68 But those are largely untested government statements. The public do not have:
- the calculations and underlying workings that were used by the Lead Advisor to generate its total cost estimates for building the NBN; nor
- a comprehensive statement of what are or will be the alleged and predicted benefits of the government's NBN project.
- 2.69 Submitters differed in the extent to which they viewed the Implementation Study as justifying the government's NBN policy.
- 2.70 Industry players and telecommunications experts were generally in agreement as to the importance of the Implementation Study and submitted that the priority should now be to implement the NBN as opposed to questioning whether it can or should be implemented.
- 2.71 Other analysts, the Business Council of Australia, and expert economists providing evidence to the committee, submitted that it remains premature to implement the government's NBN project before subjecting the workings of the Lead Advisor for the Implementation Study to public scrutiny and conducting a cost-benefit analysis into whether the project should even proceed.

#### Attitude of industry players and telecommunications experts

2.72 The Internet Society of Australia explained that, following the release of the Implementation Study, it:

continues to applaud the Government's 2009 commitment to the NBN. High speed broadband will be the main driver not only for new, faster communications services, but a critical factor in the delivery of Government services such as e-health and online education and training. It

The Hon. Lindsay Tanner, Minister for Finance and Deregulation and Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'Landmark study confirms NBN vision is achievable and affordable', Joint media release, 6 May 2010, <a href="https://www.minister.dbcde.gov.au/media/media releases/2010/040">www.minister.dbcde.gov.au/media/media releases/2010/040</a> (accessed 8 June 2010).

will also be a critical factor for innovation and economic growth in a digital economy. <sup>67</sup>

2.73 Optus submitted that the publication of the Implementation Study had resolved a number of 'long running' debates and that it is time to move on to actually implementing the NBN:

Optus strongly supports the overall conclusion of the Study, that a wholesale-only, equivalent open access network, providing 21st super-fast century broadband services to all Australians, is indeed viable... Optus strongly recommends that the Government takes on board many of the conclusions and recommendations of the Study to end the debate on the NBN and get on with the job of building the network to hasten the critical reform this industry so desperately needs.<sup>68</sup>

2.74 Mr John Hilvert, Communications Director of the Internet Industry Association – an association representing major suppliers, content creators, developers and lawyers – put that Association's position as follows:

[The Internet Industry Association has] one message for you guys: Australia deserves broadband and we need it now. We have one shot. Please do not blow it.<sup>69</sup>

# Attitude of economic experts, Business Council of Australia, and other telecommunications experts

- 2.75 Independent economists were more sceptical of the merit of rushing headlong into implementing the government's NBN project without subjecting it to the same cost-benefit analysis testing required of all major infrastructure projects.
- 2.76 The committee has extracted above the evidence of experts such as Professor Henry Ergas, Dr Mark Harrison, and Professor Paul Kerin that a cost-benefit analysis is still required in order to justify whether this project should proceed. Those economists stated that it is not possible to take the Implementation Study's costings at face value because the underlying workings underpinning the Lead Advisor's work have not been released for public scrutiny.
- 2.77 Professor Henry Ergas explained to the committee the limitations of the Implementation Study absent its assumptions and calculations being laid bare:

I believe it would be highly desirable for the detailed workings that underpin the results that are presented in the implementation study to be public. It is often very difficult in reading the report to understand precisely what has been done and why it has been done that way. I cannot imagine

<sup>67</sup> Internet Society of Australia, Submission 140, p. 1.

<sup>68</sup> Optus, Submission 134iii, pp 1–2.

<sup>69</sup> Mr John Hilvert, Communications Director, Internet Industry Association, *Committee Hansard*, Sydney, 20 May 2010, p. 11.

that there are significant issues of commercial confidentiality and, to the extent to which there are such issues, they could be dealt with by requiring those having access to confidential information to fill in the appropriate undertakings or to commit to the appropriate confidentiality undertakings. Having access to the underlying material would be helpful in both assessing the implementation study and coming to a more well-founded assessment of its strengths and weaknesses, but also in terms of informing the broader public debate. As a result, I would urge the committee to do all it can to ensure that the detailed workings that underpin this study are made public in a timely and comprehensive way.

2.78 The Professor went on to explain that the public release of the calculations is even more important given the considerable doubt that exist as to the validity of some of the assumptions made:

[T]he study makes a number of assumptions that seem to me optimistic. It is very difficult to test those assumptions without access to the detailed workings, but as best as one can tell from the summary that is given in the report, there are a number of areas where the study team's approach is rather optimistic in terms of the prospects for NBN Co. One area that I have signalled in that respect, and it is not the only one, is the assumptions with respect to price trends over time. The study, as you know, assumes that prices that are received by NBN Co. for its services increase steadily and continuously over time. That, of course, is in complete contrast to the experience of Australian telecommunications over the period from the 1980s to the present and is also in contrast to the experience internationally, as well as to current trends.<sup>71</sup>

2.79 In response to a related question on notice to the department about the feasibility of NBN Co being able to increase its wholesale access pricing over time, the department had explained:

The Study models an indicative price architecture for a range of likely services that the NBN Co will offer. It assumes that real revenues per user will naturally trend higher over time (although at a modest rate of less than 2% p.a), before levelling off. There are two primary reasons that the Study takes this approach.

Firstly, it expects that over time users will gradually move to higher value bitstream products as they increasingly demand greater average speeds on the network. For example a customer who takes an introductory 20 Mbps bitstream product initially, may find over time that they require greater bandwidth to run the latest in applications and therefore upgrades to a faster plan with higher speeds. These premium products will produce higher average revenues per user for the NBN Co.

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<sup>70</sup> Professor Henry Ergas, *Committee Hansard*, Canberra, 4 June 2010, p. 2.

<sup>71</sup> Professor Henry Ergas, *Committee Hansard*, Canberra, 4 June 2010, p. 2.

Secondly, the Study expects that over time the ACCC will allow access prices to rise gradually to enable the NBN Co to achieve a reasonable return on network assets. Any increases in access charges allowed by the ACCC would have to meet strict criteria including affordability and only allow a fair return on a regulatory asset base, over which the ACCC will have complete transparency.<sup>72</sup>

#### 2.80 To that, Professor Ergas responded:

comments about price assumptions from the department ... point out that the assumption of increasing prices over time reflects a mix of factors, in particular there is an assumption that over time NBN Co. will be selling a progressively higher speed or otherwise higher price range of services, so there is some change in the composition of the services it sells, but also that prices across the board will be increasing. That is entirely correct, but the study itself is very cautious in terms of the prospects for the composition of NBN Co. services to change to higher priced services over time. It cautions against assuming that such upgrading will occur or that it will occur at any point early in the deployment and operation of the new network. As a result, in terms of the factors that affect the commercial and broader economic liability of the new network, one has to assume that the bulk of the work, in terms of the per-unit revenue change, comes from this pure increase in prices over time. Again, it would be highly desirable for NBN Co. or the department to disclose the detailed workings that underpin those price projections so that analysts can look at whether those projections are in fact reasonable.<sup>73</sup>

2.81 Mr Kevin Morgan also submitted that it is important that the underlying charts and spreadsheets generating the Lead Advisor's conclusions are provided for public debate:

[T]he business case [posited by the Implementation Study] itself is contingent. This is the problem. There is so little data there. There are a few headline charts that draw together what is obviously an enormous amount of work, but in the absence of the underlying charts, you cannot really see how that chart is put together.<sup>74</sup>

2.82 For Mr Morgan, the issue is not so much about examining the accuracy of the calculations, but the assumptions that have been used and that underpin the results:

I find the study a bit less than persuasive. When you look at the take-up rates that are posited, you would basically have to have all of the URL players come across pretty quickly and some of Telstra's customers come across too. Telstra would have to be selling fibre on behalf of NBN Co. which, if they are at war, is an unlikely scenario. I do not doubt that the

Department of Broadband, Communications and the Digital Economy, answer to question on notice, 20 May 2010 (received 3 June 2010).

<sup>73</sup> Professor Henry Ergas, *Committee Hansard*, Canberra, 4 June 2010, p. 3.

<sup>74</sup> Mr Kevin Morgan, *Committee Hansard*, Sydney, 20 May 2010, p. 38.

underpinnings of this study and those spreadsheets will all add up. You do not hire McKinsey and get spreadsheets and numbers that do not add up. The critical issue is the assumptions. The assumption that Telstra, if it is not on board, will not engage in some kind of competitive response is a bit of a big ask. The other issue is—and I know it was canvassed quite widely this morning—whilst we have relatively high rates of broadband take-up for the lower speed ADSL1—1.5 megabit—services, it has grown for the ADSL2 services. We have seen this enormous explosion of wireless broadband and there has been a rather misguided debate, mis-focused debate perhaps, that wireless broadband can displace fixed line broadband. For most users that is not the case. 75

2.83 Finally, Professor Paul Kerin stated that he believes the numbers in the Implementation Study, even taken at face value, do not 'stack up':

My concern, from a finance perspective, is that even if you believe the McKinsey-KPMG numbers it does not stack up. I am also concerned about process, because it is pretty pointless doing a business case after you have already decided to spend \$43 billion of taxpayer money, because you know what the answer is going to be. <sup>76</sup>

2.84 The idea that the figures used in the Implementation Study are a reverse-engineered effort to retrospectively justify the government's initial pie-in-the-sky guesstimates of costs was also canvassed by Mr Kevin Morgan:

The study says itself it is not a cost-benefit analysis, it does not tell us whether this is value for money, it does not tell us whether there are alternatives that could be invested into to deliver high-speed broadband. The study, I think, and I do not think they would be too coy about it, backs in to the \$43 billion cost envelope. It puts a business plan within that cost envelope. Very conveniently; I think it is quite amazing that it came out with \$42.8 billion.<sup>77</sup>

2.85 Although not necessarily as sceptical of the Implementation Study's analysis and conclusions, the Business Council of Australia was in agreement that, if anything, release of the Implementation Study has only enhanced the need for a cost-benefit analysis to be conducted:

While the study findings are in some areas based on 'conservative' assumptions, it nevertheless makes a number of critical assumptions about costs, take-up rates and competitor behaviour that are subject to a high degree of variability. As the study acknowledges, seemingly small decisions have a substantial impact on the results of the business case. This would make any final NBN Co. business case based on the recommendations of the study subject to a high degree of uncertainty.

<sup>75</sup> Mr Kevin Morgan, *Committee Hansard*, Sydney, 20 May 2010, p. 37.

<sup>76</sup> Professor Paul Kerin, *Committee Hansard*, Canberra, 4 June 2010, p. 28.

<sup>77</sup> Mr Kevin Morgan, Committee Hansard, Sydney, 20 May 2010, p. 33.

The study's findings and recommendations also raise a number of questions about the application of competition policy and the potential for wider market impacts, discussed in more detail below.

The government should now take the opportunity to produce a cost–benefit analysis to unequivocally demonstrate the proposed investment is in the national interest and to dispel any concerns about broader impacts of the NBN and the operations of NBN Co. on competition in the telecommunications sector.<sup>78</sup>

#### An offer to conduct a cost-benefit analysis

2.86 During the committee's final hearing, Professor Henry Ergas stated his belief that a cost-benefit analysis of this project would be in the national interest, and further, offered to conduct that analysis himself and free of charge to the government if the detailed workings and underpinnings of the Implementation Study are released:

[I]f the government is willing to disclose the information and the detailed workings that underpin this study, I would be happy to use those in the model that we already have in place to generate a cost-benefit appraisal at no cost to the taxpayer. All that is required is that we be given access to the underlying workings. If, for whatever reasons, the government does not want to do that, there are many people in government and in the major departments who are capable of taking these results and transforming them into a cost-benefit appraisal of the project. I see no reason whatsoever why Treasury or Finance could not undertake such a cost-benefit appraisal now that the information required is fully available and indeed has been paid for by the taxpayer.

2.87 Professor Ergas indicated that so long as the workings underpinning the Implementation Study were 'provided in a form that is understandable, readily documented and easily usable', then the cost-benefit analysis could be concluded 'in a matter of days'.<sup>79</sup>

#### Committee view

- 2.88 The committee believes that the public must be provided with:
- the calculations and underlying workings that were used by the Lead Advisor to generate its total cost estimates for building the NBN; and
- a comprehensive statement of what are or will be the alleged and predicted benefits of the government's NBN project.
- 2.89 In the absence of that information, the public are simply not in a position to judge for themselves whether the cost projections are realistic. They have no way of knowing whether in fact the government's NBN project will leave them with a

<sup>78</sup> Business Council of Australia, *Submission 136ii*, pp 4–5.

<sup>79</sup> Professor Henry Ergas, *Committee Hansard*, Canberra, 4 June 2010, p. 5.

taxpayer-funded company that will be unable to attract private-sector investment and will drain taxpayers of enormous sums of money well into the future.

2.90 The committee does not doubt that Australians need a broadband future. But the committee believes the public are not in a position to test whether the government's NBN project is the most appropriate model for delivering effective, affordable broadband services to Australians. The government claims benefits will flow from its NBN, but those benefits have not been articulated in sufficient detail. Nor have they been pitted against the benefits that would flow from implementing an alternative model for delivering broadband services to Australians.

#### **Recommendation 1**

Notwithstanding that the committee, for reasons detailed in its Fourth Interim Report, recommended that the government abandon its NBN proposal in its current form, the committee acknowledges that the government is proceeding with its NBN proposal and accordingly recommends:

- 2.91 That the government provide the public with:
  - the calculations and underlying workings that were used by the Lead Advisor to generate its total cost estimates for building the NBN; and
  - a comprehensive statement of what are or will be the alleged and predicted benefits of the government's NBN project.
- 2.92 That the government commission a rigorous cost-benefit analysis of its NBN project, or at least in the first instance, accept Professor Henry Ergas' generous offer to conduct a cost-benefit analysis free of charge.

Senator Ian Macdonald

Chair