

LEGISLATIVE ASSEMBLY



# Standing Committee on Broadband in Rural and Regional Communities

Are you connected?

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Inquiry into telecommunications availability in rural and regional  
communities

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# Table of contents

Membership and staff.....	iii
Committee terms of reference.....	iv
Inquiry terms of reference .....	v
Chair’s foreword .....	vi
List of recommendations .....	vii
Abbreviations.....	viii
Glossary .....	ix
<b>CHAPTER ONE - INTRODUCTION.....</b>	<b>1</b>
Role of the Committee .....	1
Scope of the inquiry .....	1
National Broadband Network .....	1
Customer service expectations.....	2
Landline telephone connections.....	2
Inquiry process.....	2
Submissions.....	2
Public hearings .....	2
Timing of the inquiry.....	2
<b>CHAPTER TWO - GOVERNMENT ROLES AND PROGRAMS.....</b>	<b>4</b>
Federal Government .....	4
Legislation, regulations and policy to ensure telecommunications access.....	4
Inter-governmental coordination of telecommunications access.....	5
Infrastructure investments and programs.....	6
New South Wales Government.....	10
Connected Classrooms Program .....	10
<b>CHAPTER THREE - PERCEPTIONS OF SERVICES .....</b>	<b>12</b>
Issues raised in submissions .....	12
Mobile phone services .....	13
Broadband services .....	14
Summary.....	15
<b>CHAPTER FOUR - CURRENT SERVICE AVAILABILITY .....</b>	<b>16</b>
Mobile phone service .....	16
Movement to 3G networks .....	17
Mobile phone coverage.....	18
Broadband.....	19
ADSL broadband technology .....	25

Table of contents

Movement to ADSL2+ .....	26
Broadband blocks .....	27
Available speeds .....	28
Costs .....	29
Wireless broadband .....	30
<b>CHAPTER FIVE - IMPROVING ACCESS AND INFRASTRUCTURE .....</b>	<b>32</b>
Government strategies and programs .....	32
Improvements to mobile phone coverage .....	32
Improvements to broadband .....	33
Fibre network .....	33
Non-fibre options .....	33
Summary .....	35
<b>CHAPTER SIX - AVENUES OF REDRESS FOR CUSTOMERS .....</b>	<b>37</b>
Ensuring adequate services .....	37
Avenues of redress .....	37
Government agencies .....	37
Federal Government .....	37
New South Wales Government .....	38
Non-government bodies .....	39
Summary .....	40
<b>APPENDIX ONE – LIST OF SUBMISSIONS .....</b>	<b>42</b>
<b>APPENDIX TWO – LIST OF WITNESSES .....</b>	<b>44</b>
<b>APPENDIX THREE – EXTRACTS FROM MINUTES .....</b>	<b>46</b>

## Membership and staff

<b>Chair</b>	Ms Sonia Hornery MP, Member for Wallsend (from 11 March 2010)
	Mr Paul Gibson MP, Member for Blacktown (until 25 February 2010)
<b>Members</b>	Mr Peter Besseling MP, Member for Port Macquarie
	Mr Andrew Constance MP, Member for Bega
	Mr David Harris MP, Member for Wyong
	Mr Gerard Martin MP, Member for Bathurst
	Mr Geoff Provest MP, Member for Tweed
	Mr Tony Stewart MP, Member for Bankstown
<b>Staff</b>	Dr Carolyn Littlefair, Committee Manager (from 10 May 2010), Senior Committee Officer (until 7 May 2010)
	Ms Vicki Buchbach, Committee Manager (until 7 May 2010)
	Ms Rachael Fraher, Senior Committee Officer (from 19 July 2010)
	Dr Samantha Sharpe, Senior Committee Officer (from 10 May 2010 until 30 July 2010)
	Ms Emma Wood, Research Officer (from 9 August 2010)
	Ms Kylie Rudd, Research Officer (until 30 June 2010)
	Mr Jon Frazer, Assistant Committee Officer
<b>Contact details</b>	Standing Committee on Broadband in Rural and Regional Communities Parliament of New South Wales Macquarie Street Sydney NSW 2000
<b>Telephone</b>	02 9230 2029
<b>Facsimile</b>	02 9230 3309
<b>E-mail</b>	broadband@parliament.nsw.gov.au
<b>URL</b>	www.parliament.nsw.gov.au/broadband

## Committee terms of reference

The Legislative Assembly Standing Committee on Broadband in Rural and Regional Communities was established on 21 June 2007 to inquire into the needs of rural and regional communities in relation to telecommunications (including broadband) and other technology services and, in particular, to report on the following terms of reference:

- (a) The availability of telecommunications (including broadband) and other technology services in rural and regional communities;  
The benefits and opportunities for rural and regional communities of having access to telecommunications (including broadband) and other technology services;
- (b) Disincentives and barriers to the provision of telecommunications (including broadband) and other technology services to rural and regional communities;  
The consequences for rural and regional communities of not having, or not having adequate, access to telecommunications (including broadband) and other technology services, having regard to likely future industry and technological developments; and
- (c) Options for encouraging providers of telecommunications (including broadband) and other technology services to extend services to rural and regional communities.

## Inquiry terms of reference

On 12 November 2009, the Standing Committee on Broadband in Rural and Regional Communities resolved to conduct a new inquiry into the availability of telecommunications (including broadband) and other technology services in rural and regional communities with a particular focus on:

- (a) Differences between advertised service availability and consumer experiences of service levels;
- (b) Gaps in service provision in particular regions; and
- (c) Options for improving service availability.

## Chair's foreword

Throughout the term of this Committee the importance of telecommunications availability has not diminished and the issue of it is one we have revisited in every report the Committee has completed. The Committee has heard of the continuing existence of the 'digital divide' between metropolitan and non-metropolitan areas and of continuing service availability that falls well short of the expectations of people in rural and regional communities.

From the submissions the Committee could clearly see that people recognise the convergence of telecommunications technology. The issues are no longer just about poor mobile phone coverage or internet access, but overall lower levels of telecommunications service availability that was affecting how people live, run a business, participate in education or engage in social networking.

The predicted \$43 billion investment by the Federal Government into the National Broadband Network (NBN) will markedly change telecommunications access in Australia. However, completion of the NBN is not expected until 2018, which will mean communities may have a long wait before they see significant improvements in telecommunications availability.

Also, for 7% of the population, connection to the NBN will not be through fibre, but rather will be delivered by fixed access wireless or satellite technology. This 7% of the population will largely be in rural and regional communities. Many questions remain unanswered about the ability of these technologies to deliver adequate service quality at prices equitable to the fibre network. The Committee also remains concerned about the timetable of delivery for these alternatives.

This Committee is not alone in recognising the challenge of improving telecommunications access in rural and regional areas. We were interested to learn of the work not only of the Federal Government through their programs and infrastructure investments but also the work of agencies such as the Australian Communications and Media Authority, Telecommunications Ombudsman and Australian Communications Consumers Action Network.

In this report we have made a number of recommendations to improve the co-ordination between the levels of government in delivering telecommunications services. We have also made recommendations that seek to clarify the position of regional and rural areas in the rollout of the NBN. It is clear from the evidence received by this Committee that rural and regional communities will need continuing representation of their needs and views as the rollout of the NBN proceeds.

I would like to thank all the groups and individuals who contributed to this inquiry either through making submissions or meeting with the Committee. I would also like to thank my colleagues for their participation in Committee activities and the secretariat for their efforts in preparing this report.

Sonia Hornery, MP  
Chair

## List of recommendations

RECOMMENDATION 1: The New South Wales Government continues to encourage the Federal Government to improve and promote information and knowledge of mobile phone service availability in regional and rural areas to aid consumers decision making. ....	19
RECOMMENDATION 2: The New South Wales Government continues to encourage improved broadband services for regional and rural communities by working with the Federal Government to ensure new infrastructure is directed to currently under-serviced areas. ....	31
RECOMMENDATION 3: The New South Wales Government works with the Federal Government to ensure the National Broadband Network rollout gives a high priority to areas currently without terrestrial broadband services and consults with local communities to ensure the rollout can be tailored to deliver maximum benefit to these less serviced populations. ....	33
RECOMMENDATION 4: The New South Wales Government continues to represent the telecommunications needs of rural and regional communities throughout the rollout of the National Broadband Network. ....	35
RECOMMENDATION 5: The New South Wales Government continues to invest in programs that increase telecommunications access for rural and regional communities prior to the expected completion of the National Broadband Network. ....	36
RECOMMENDATION 6: The New South Wales Government works with the Federal Government and associated agencies to develop and promote a centralised educational resource of telecommunication users' rights and avenues of redress. ....	41

## Abbreviations

ABG	Australian Broadband Guarantee
ABS	Australian Bureau of Statistics
ACCAN	Australian Communications Consumers Action Network
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
CCP	Connected Classrooms Program
COAG	Council of Australian Governments
CTN	Consumers Telecommunications Network
CTTT	Consumer Tenancy and Trade Tribunal
DBCDE	Department of Broadband, Communications and the Digital Economy (Federal)
DDSO	Digital data service obligation
DET	Department of Education and Training (New South Wales)
Gbps	Gigabits per second
ISP	Internet service provider
kbps	Kilobits per second
Mbps	Megabits per second
NBN	National Broadband Network
NBN Co	NBN Co Limited
RFP	Request for proposal
RIM	Remote integrated multiplexer
RTIRC	Regional Telecommunications Independent Review Committee
SME	Small and medium sized enterprises
TIO	Telecommunications Industry Ombudsman
USO	Universal Service Obligation

## Glossary

2G	'Second generation' wireless telephone technology services that use digital techniques (in contrast to the previous analog 1G transmission) to provide voice communications and a relatively low transmission rate for data.
3G	'Third generation' wireless telephone technology is a platform supporting multimedia voice, video and data services, more advanced than the 2G network.
4G	The latest generation of mobile phone wireless standards being developed to accommodate the quality and rate of service required by applications like mobile broadband access, multiple media service (MMS), video chat, mobile television.
ADSL	'Asymmetrical digital subscriber line' is a transmission method allowing high data rate communication over existing copper wires. The downstream data transmission rate (data downloaded by the user) is much higher than the upstream data rate.
ADSL2	Higher data rate ADSL with greater reach from local telephone exchanges, dynamic data rate adaptation, better resistance to noise, a stand-by mode to save power, and reduced initialisation time.
ADSL2+	Version of ADSL that uses double the bandwidth for downstream data transmission, effectively doubling maximum downstream data rates.
Backhaul	The signal traffic between regional access points and centralised 'points of presence' such as a single mobile phone tower link to a telephone company's network.
Broadband	A class of internet access technologies (such as ADSL, HFC, cable and wireless) offering data rates significantly higher than narrowband services. These services are usually 'always on' and do not tie up the telephone line exclusively for data. Broadband is a relative rather than an absolute concept. The lower limit for broadband access is widely regarded as 256 kbps.
CDMA	'Code division multiple access' network refers to a mobile phone network which was operated by Telstra until 2008 focussed primarily on servicing rural and regional areas.
DSL	'Digital subscriber line' is the technology that enables broadband services to be delivered through the copper phone network. DSL is a distance-limited technology, meaning the further a subscriber is from the exchange the more the service declines.
FTTP	'Fibre-to-the-premises' refers to a broadband network architecture that uses optical fibre to replace all or part of the usual metal local loop used for last mile communications.
GSM	The 'global system for mobiles' is a 2G mobile phone network.

HFC	'Hybrid fibre-coaxial' is a telecommunications industry term for a broadband network that combines optical fibre and coaxial cables.
Last mile infrastructure	The infrastructure used to provide the link from a customer's premises to the provider's nearest point of aggregation. For example, a provider offering a wireless broadband service to a customer would be providing last mile infrastructure using wireless broadband technology.
Local loop/ Subscriber line	A single physical link that connects from a customer's premises to the edge of a telecommunications service provider's network.
Multiplexer/ Multiplexing	A device that combines several input information signals into one output signal; this action is known as 'multiplexing' or to 'multiplex'.
Pair gain system or pain gain	A method of transmitting multiple signals over twisted pair cables traditionally used as the local loop or subscriber line. It has the effect of creating additional subscriber lines and is typically used as an expedient way to solve subscriber line shortage problems by using existing wiring, instead of installing new wires to a customer's premises.
RIM	Remote Integrated Multiplexer, also known as digital loop carriers (DLC), is a system that uses digital transmission to extend the range of the local loop further than would be possible using only twisted pair copper wires.
Regional and rural communities	Throughout this report 'regional and rural communities' refers to any area outside major cities. The Australian Bureau of Statistics applies categories of 'remoteness' based on an area's distance by road from urban areas. <sup>1</sup> More than 70% of the six and a half million people who live in New South Wales live within the 'major cities' area. Some 400,000 people or 20% of the population reside in the 'inner regional' area. Outside this population, densities drop rapidly. Only 6.5% of the population live in areas defined as 'outer regional', and less than half of one per cent live in 'remote areas'. Approximately 4,000 people or 0.067% of the State's population live in 'outer remote' areas. <sup>2</sup>
Satellite broadband services	A service solution delivered by a two-way satellite service, or other service determined by the government to be satellite based.

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<sup>1</sup> I Ewing, *Australian Standard Geographical Classification (ASGC)*, cat. no.1216.0, ABS, Canberra, July 2009, p.37. This definition is used in all of the Committee's reports.

<sup>2</sup> ABS, *2006 Census of Population and Housing, Table B01 for Regions of NSW*, Canberra, 2006.

# Chapter One - Introduction

## Role of the Committee

- 1.1 The Standing Committee on Broadband in Rural and Regional Communities was appointed to investigate the telecommunications needs of rural and regional communities with a particular emphasis on broadband access, and its terms of reference include: assessing the availability of telecommunication services, establishing the benefits of these services to rural and regional communities, identifying barriers and disincentives to service delivery and reporting on options for encouraging service providers to extend services to new areas.
- 1.2 Under the Australian constitution, the Federal Government has regulatory powers over communications.<sup>3</sup> Therefore, the Committee's role is constrained by the fact that the New South Wales Government has limited control over the delivery of telecommunications services. There is also a high degree of private ownership of telecommunications infrastructure in Australia, which means that private sector carriers make most decisions about service delivery on a commercial basis.<sup>4</sup>
- 1.3 The Committee is, however, able to highlight significant and ongoing issues of concern to rural and regional communities, recommend appropriate action for the State Government and suggest that it encourage Federal Government activity in certain areas.

## Scope of the inquiry

### National Broadband Network

- 1.4 The Committee understands that the Federal Government's plans for a National Broadband Network (NBN) will bring fast internet infrastructure to Australia and significantly change broadband access for Australians. For 93% of households and businesses, broadband internet will be delivered via a fibre network. Of the remainder, 4% will be delivered via fixed wireless and 3% by satellite.<sup>5</sup> This 7% of the population outside the fibre network will primarily be in rural and regional areas.
- 1.5 In addition, the NBN is not expected to be completed until 2018. Questions also remain about the ability of fixed wireless and satellite technology to deliver an adequate quality of service and at an equivalent price to that of the fibre network.<sup>6</sup>
- 1.6 In light of these plans, the inquiry identified two areas of ongoing concern in telecommunication service delivery in rural and regional communities, despite current activity around the NBN:
  - service levels prior to the roll-out of the fibre footprint of the NBN – how telecommunication access is going to be facilitated in the intervening period, and
  - broadband solutions on offer for the non-fibre 7% of the population who are not included in the NBN fibre footprint.

<sup>3</sup> *Australian Constitution* 1901, s 51(v).

<sup>4</sup> Engineers Australia, *Infrastructure Report Card 2007*, p.5.

<sup>5</sup> The Hon J Gillard (Prime Minister) 2010, *National Broadband Network*, campaign media release, ALP, Barton, ACT, 30 July.

<sup>6</sup> Senate Select Committee on the National Broadband Network, *Final Report*, Senate Printing Unit, Parliament House, Canberra, June 2010, pp.15-18.

## Customer service expectations

- 1.7 Whilst concerns over infrastructure remained a constant issue for rural and regional communities, other factors have impacted on people's satisfaction with telecommunication services. The Committee has published two previous reports detailing their investigations into telecommunications access in rural and regional areas.<sup>7</sup> During the undertaking of these previous inquiries a recurring theme has been the mismatch between service expectations and actual service availability in regional and rural communities.
- 1.8 Due to the constant recurrence of this theme the Committee decided to undertake an inquiry into the prevalence of difference between service expectations and service availability.

## Landline telephone connections

- 1.9 This report primarily deals with two forms of telecommunications service: mobile phone service and broadband internet services. Through the Universal Service Obligations provisions, all residences and places of business are entitled to landline telephone connections. While there may be continuing issues over the length of time taken to install and repair landlines, their availability is not an issue and therefore not a focus of this inquiry.

## Inquiry process

### Submissions

- 1.10 In November 2009, the Committee called for submissions by advertising its terms of reference and writing directly to key stakeholders. It received 41 submissions from telecommunications companies, state and local governments agencies and individuals. A list of submissions can be found in Appendix One and copies of the submissions are available from the Committee's website.

### Public hearings

- 1.11 The Committee held public hearings in Sydney on 19 and 23 April 2010. It heard from telecommunications companies, key rural stakeholders groups, public sector agencies, representatives of local government, and interested individuals. A list of witnesses can be found in Appendix Two and copies of the transcripts are available on the Committee's website.

### Timing of the inquiry

- 1.12 This inquiry was initiated, submissions received and hearings undertaken, prior to the release of the NBN Implementation Study<sup>8</sup> (May 2010), the fibre footprint maps (July 2010) and at a time when key elements of NBN are yet to be finalised. For this reason, recent progress or changes in the NBN may not be fully reflected in the evidence obtained during this inquiry.

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<sup>7</sup> Standing Committee on Broadband in Rural and Regional Communities, *Beyond the Bush Telegraph: Meeting the growing communications need of rural and regional people*, Report no. 2/54, New South Wales Legislative Assembly, Sydney, NSW, March 2009; *Progress Report on the Committee's activities: Meeting rural and regional communication needs*, Report no. 3/54, New South Wales Legislative Assembly, Sydney, NSW, March 2010.

<sup>8</sup> McKinsey & Company and KPMG, *National Broadband Network Implementation Study*, May 2010.

- 1.13 The Committee notes that this report will be tabled prior to a resolution of the hung parliament in the House of Representatives following the Federal election on 21 August 2010. The final outcome of which party or parties will form government is likely to affect the future of broadband infrastructure in Australia.
- 1.14 The Committee has decided to table its report at this time as all evidence was obtained on the assumption that the NBN would proceed in its original form. Should this not be the case, through either amendments to the NBN or the introduction of different programs, the intent of the Committee's recommendations will still be applicable in any efforts to improve the provision of broadband services in rural and regional communities.

## Chapter Two - Government roles and programs

- 2.1 This chapter provides an overview of current and recent programs and projects addressing telecommunication access issues at both the Federal and State Government levels. However, this is not an exhaustive list of government activity. More detailed discussions of government programs can be found in the Committee's previous reports.<sup>9</sup>
- 2.2 Telecommunications services in Australia are predominately provided by the private sector and decisions about service delivery by these private telecommunications companies are based upon commercial concerns.
- 2.3 Over recent years however, governments at both a Federal and State level have attempted to influence service delivery in situations of market failure, such as telecommunication services in rural and regional areas, in order to ensure that:
- [Telecommunication services] of social importance are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business...and are supplied as efficiently and economically as practicable, and...at performance standards that reasonably meet the social, industrial and commercial needs of the Australian community.<sup>10</sup>
- 2.4 This has been achieved through the introduction of legislative, regulatory and policy frameworks and by providing subsidies and funded programs to build telecommunications infrastructure, as set out below.
- 2.5 A number of bodies have also been established to both regulate the telecommunications industry and represent the interests of consumers. These institutions are outlined in further detail in Chapter Six.

### Federal Government

#### Legislation, regulations and policy to ensure telecommunications access

- 2.6 The Federal Government has principal responsibility for regulating communications in Australia. The central part of the legislative framework for telecommunications is the *Telecommunications Act 1997*.
- 2.7 There is also a range of legislation related to the regulation of service delivery such as the *Australian Communications and Media Authority Act 2005*, *Trade Practices Act 1974* and *Telstra Corporation Act 1991*.
- 2.8 Provision of safeguards for telecommunications consumers has also been legislated and is now restated in a single Act, the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.<sup>11</sup>
- 2.9 From this legislation, three mechanisms have been established that the Federal Government uses to ensure telecommunications access:

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<sup>9</sup> Standing Committee on Broadband in Rural and Regional Communities, *Beyond the Bush Telegraph: Meeting the growing communications need of rural and regional people*, Report no. 2/54, New South Wales Legislative Assembly, Sydney, NSW, March 2009; *Progress Report on the Committee's activities: Meeting rural and regional communication needs*, Report no. 3/54, New South Wales Legislative Assembly, Sydney, NSW, March 2010.

<sup>10</sup> *Telecommunications Act 1997* (Cwlth), s 2(a).

<sup>11</sup> As previously contained in the *Telecommunications Act 1997* (Cwlth) and the *Telstra Corporation Act 1991* (Cwlth).

- The **Universal Service Obligation (USO)** ensures that the Universal Service Provider in Australia, currently Telstra,<sup>12</sup> delivers access to landline telephones, payphones and prescribed carriage services on an equitable basis to all people in Australia wherever they reside and/or carry out business.<sup>13</sup> In return for fulfilling these obligations, any losses that Telstra makes as a result of the USO are shared among all carriers via a funding formula levy on other carriers.
- The **Digital Data Service Obligation (DDSO)** is a further obligation on providers to ensure that digital data services are accessible to all Australians on an equitable basis. The DDSO has two components: the general DDSO for people residing in general digital data service areas (covering approximately 96% of the population) and the special DDSO, covering the remaining 4% of the population, and including many people in regional and remote areas. Each DDSO requires different service level obligations in terms of speed and cost of digital service.
- The **Australian Broadband Guarantee (ABG)** has both a regulatory and a program function. The program aspect provides funding to internet service providers (ISPs) to provide comparatively priced (to metropolitan areas) internet services to non-metropolitan customers (these are discussed in further detail in paragraph 2.27) The ABG also sets a minimum standard of service: that ISPs must offer 512 kbps download and 128 kbps upload rate.

## Inter-governmental coordination of telecommunications access

### Online and Communications Council

- 2.10 A key avenue for inter-governmental dialogue is the Online and Communications Council. The Council was established by the Council of Australian Governments (COAG) in 1997 to act as the peak ministerial forum for consultation on, and coordination of, information and communications matters.
- 2.11 The Council is chaired by the Minister of Broadband, Communications and the Digital Economy, the Hon. Senator Stephen Conroy and includes representatives from State and Local Governments. The Hon. Paul Lynch, Minister for Industrial Relations, Commerce, Energy, Public Sector Reform and Aboriginal Affairs represents New South Wales on the Council. Local government is represented by the President of the Local Government and Shires Association, currently Councillor Geoff Lake.
- 2.12 In May 2008 the Council adopted the *Framework for the collaborative development and use of broadband in Australia*.<sup>14</sup> This document set out broad principles for the development of broadband infrastructure including:
- All Australians should have equitable access to high-speed broadband, and the social and economic benefits this capability brings.<sup>15</sup>

<sup>12</sup> Telstra is currently the sole Universal Service Provider, although other providers could be added at later dates.

<sup>13</sup> *Telecommunications (Consumer Protection and Service Standards) Act 1999* (Cwlth), s 9. No carriage services have been prescribed to date.

<sup>14</sup> Online and Communications Council, *Framework for the collaborative development and use of broadband in Australia*, DBCDE, Canberra, May 2008.

<sup>15</sup> Online and Communications Council, *Framework for the collaborative development and use of broadband in Australia*, DBCDE, Canberra, May 2008, p. 2.

### **National Broadband Development Group**

- 2.13 The Framework also instigated the establishment of the National Broadband Development Group. This working group is tasked with developing national policy settings and supportive collaborative arrangements for the development of the NBN. The Group is chaired by the Department of Broadband, Communications and the Digital Economy. Member of the Group include representatives from:
- the Federal Department of Infrastructure, Transport and Regional Development and Local Government
  - the Federal Department of Health and Ageing
  - the Federal Department of Education, Employment and Workplace Relations
  - the Information Management Office
  - all state and territory governments
  - the Cross-Jurisdictional Chief Information Officers Committee
  - the communications industry
  - the Local Government and Shires Association.

### **Infrastructure investments and programs**

- 2.14 This section provides detail on the most recent announcements and program developments aimed at overcoming accessibility, reliability and competitive issues for telecommunications access beyond the work of the National Broadband Network (NBN). The Committee's two previous reports provide more detail and historical analysis of government infrastructure expenditure and programs in the telecommunications area.<sup>16</sup>

### **National Broadband Network**

- 2.15 On 7 April 2009, the Federal Government announced that it would establish a new company, NBN Co Limited (NBN Co), to build and operate the NBN. The NBN will be Australia's first national wholesale-only, open access broadband network, costing an estimated cost of \$43 billion.
- 2.16 The NBN will provide optical FTTP (fibre-to-the-premises) for approximately 93% of Australians living in urban areas and regional towns with a population of over 1,000. This will provide consumers with broadband capable of speeds of 100 Mbps. For populations outside this fibre footprint, wireless technology will be used for 4% and satellite for the remaining 3%. These will be capable of providing consumers with speeds of 12 Mbps.
- 2.17 On 30 July 2010 the Federal Government released maps showing the extent of the fibre network as well as which areas will have fixed wireless access and which will rely on satellite. These extent of these footprints in New South Wales are shown in Figure 1.

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<sup>16</sup> Standing Committee on Broadband in Rural and Regional Communities, *Beyond the Bush Telegraph: Meeting the growing communications need of rural and regional people*, Report no. 2/54, New South Wales Legislative Assembly, March 2009; *Progress Report on the Committee's activities: Meeting rural and regional communication needs*, Report no. 3/54, New South Wales Legislative Assembly, March 2010.

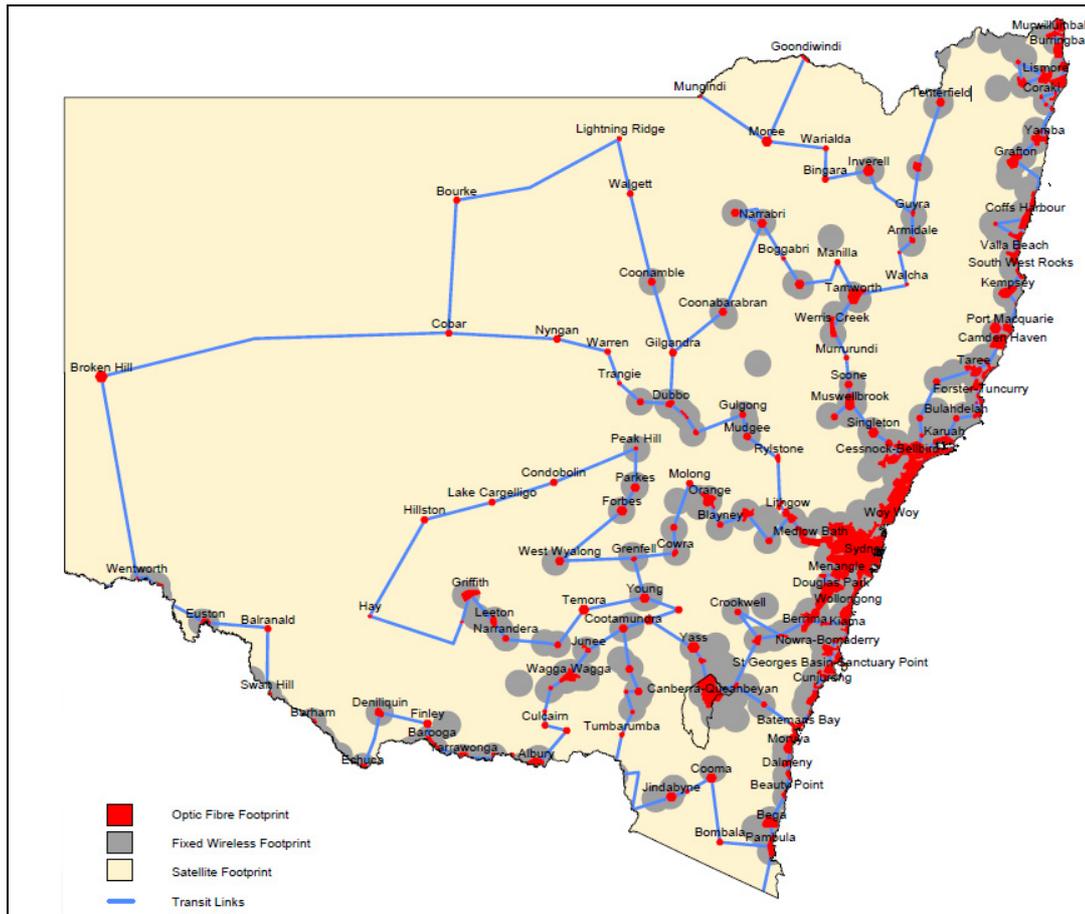


Figure 1 – Location of National Broadband Network fibre, fixed wireless and satellite footprints within New South Wales

Source: NBN Co, *Coverage maps*, viewed 2 August 2010, <<http://www.nbnco.com.au/content/upload/Coverage%20-%20New%20South%20Wales.pdf>>

- 2.18 On 6 May 2010, the NBN Implementation Study, prepared by McKinsey & Company and KPMG, was released. The study examined the coverage, commerciality and competition objectives, as well as providing detailed operating arrangements for the NBN Co. The Study also included details of the NBN's ownership and structure, ways to attract private sector investment and avenues for the longer term privatisation of the NBN. The Study contained 84 recommendations regarding the NBN, with the Federal Government yet to respond to all recommendations made.
- 2.19 On 20 June 2010, the NBN Co and Telstra announced that they had entered into a Financial Heads of Agreement.<sup>17</sup> This agreement provides for the reuse of Telstra infrastructure by NBN Co in its rollout of the NBN, including the migration of subscriber traffic, and the decommissioning of Telstra's copper network and its cable broadband service. NBN Co will pay Telstra for migration of traffic onto the NBN and the decommissioning of its network. The Heads of Agreement also provides for NBN Co's use of Telstra's existing fit-for-use infrastructure such as ducts, pits and conduit, and a right to acquire Telstra backhaul services and space in Telstra exchanges.

<sup>17</sup> NBN Co Limited 2010, *NBN Co and Telstra reach heads of agreement*, media release, NBN Co, Canberra, ACT, 20 June.

### *Fibre network rollout*

- 2.20 The first rollout of the fibre footprint of the NBN occurred in Tasmania in the communities of Smithton, Scottsdale and Midway Point in July 2010. Some of the first consumers were able to connect to the NBN through the internet service providers Internode, iiNet and iPrimus on 1 July 2010.<sup>18</sup>
- 2.21 The NBN Co announced on 2 March 2010 that the first rollout of the fibre network on mainland Australia would be undertaken at five 'first release' test sites. Two of these five sites are in New South Wales, each comprising approximately 3,000 premises. Construction work on these sites is expected to commence in the second half of 2010, with completion planned for early 2011.<sup>19</sup> The five sites are: an area west of Armidale, New South Wales which includes the University of New England; the communities of Minnamurra and Kiama Downs on the south coast of New South Wales; part of the suburb of Brunswick in Melbourne, Victoria; an area of Townsville, Queensland; and the town of Willunga, South Australia.
- 2.22 These sites will trial construction methods within areas of diverse terrain, housing type and density, demographics, climate, existing infrastructure and other local factors. These sites will also provide NBN Co with the opportunity to trial and develop its interactions with retail service providers.
- 2.23 A second rollout of the NBN fibre footprint at a further 19 sites was announced on 8 July 2010. These sites have been selected based on a range of engineering, network design and logistical criteria, and construction is scheduled for the second quarter of 2011. The new locations in New South Wales include Riverstone in Western Sydney, Coffs Harbour and extension of areas near the first rollout sites around Minnamurra, Kiama Downs and Armidale.

### **Regional Backbone Blackspots Program**

- 2.24 The Regional Backbone Blackspots Program aims to upgrade backbone infrastructure in regional Australia. Backbone infrastructure is the main transmission links between cities and towns. The program was announced on 4 December 2009 with funding of \$250 million to install approximately 6,000 kilometres of high capacity optical fibre technology transmission links (capacities of up to 10 gigabits per second) between identified 'blackspot' areas and the rest of the backbone network.<sup>20</sup> There are currently 395,000 consumers living in so-called blackspot areas, where access to broadband is limited.
- 2.25 Nextgen Networks is the private telecommunications firm responsible for rolling out the transmission links. Construction of the program commenced on 17 February 2010 and is due for completion in mid-2011.<sup>21</sup> As at 8 July 2010 over 1,100 kilometres of the backbone fibre has been rolled out.<sup>22</sup>

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<sup>18</sup> Bingemann, M. *NBN gets first customer*, The Australian, 2 July 2010, viewed 15 July 2010, <<http://www.theaustralian.com.au/australian-it/nbn-gets-first-customer/story-e6frgakx-1225887054178>>.

<sup>19</sup> NBN Co Limited 2010, *NBN Co announces "first release" sites for high speed network*, media release, NBN Co, Canberra, 2 March.

<sup>20</sup> DBCDE, *NBN: Regional Backbone Blackspots Program – fast facts*, Canberra, May 2010.

<sup>21</sup> DBCDE, *National Broadband Network: Regional Backbone Blackspots Program*, Canberra, 2010, viewed 6 July 2010, <[http://www.dbcde.gov.au/broadband/national\\_broadband\\_network/national\\_broadband\\_network\\_Regional\\_Backbone\\_Blackspots\\_Program](http://www.dbcde.gov.au/broadband/national_broadband_network/national_broadband_network_Regional_Backbone_Blackspots_Program)>.

<sup>22</sup> The Hon S Conroy (Minister for Broadband, Communications and the Digital Economy) 2010, *Second release sites announced for NBN rollout*, media release, DBCDE, Canberra, 8 July.

- 2.26 The backbone upgrade should increase competition in the provision of mobile and broadband services by making service provision more commercially viable. Benefits consumers can expect include: lower prices, more service choice, availability of more generous download limits, greater access to fixed broadband services, higher quality, increased availability and choice of mobile broadband services.

### The Australian Broadband Guarantee

- 2.27 As noted in paragraph 2.9, the Australian Broadband Guarantee is both a regulatory mechanism mandating minimum standards of broadband activity and a Federal Government initiative aimed at encouraging viable access to high quality broadband services for Australians in rural and regional communities. The program aspect of the ABG provides subsidised access to commercial metro-comparable services for areas where these services are otherwise not available while the NBN is rolled out. Eligible consumers under the Australian Broadband Guarantee can register their service with the Department of Broadband, Communications and the Digital Economy.<sup>23</sup> The ABG is designed to complement the NBN and has allocated funding of \$237.7 million over four years to 2012.

### Digital Regions Initiative

- 2.28 The Digital Regions Initiative aims to encourage innovative projects that support improved education, health and emergency services in rural and regional communities. The Initiative was established in response to the 2008 Regional Telecommunications Review, with \$60 million of Federal Government funding allocated over four years (until December 2012).<sup>24</sup>
- 2.29 Applications for projects were received in two rounds through a competitive process. State, territory and local governments were encouraged to apply for funding, while private and not-for-profit organisations were able to partner with eligible organisations.<sup>25</sup> As of January 2010 eleven projects were funded under round one of the Digital Regions Initiative. Three of these were in New South Wales, receiving a total of \$8.9 million in funding.<sup>26</sup> The second round of projects is currently being evaluated for funding.

<sup>23</sup> DBCDE, *Australian Broadband Guarantee*, Canberra, 2010, viewed 6 July 2010, <[http://www.dbcde.gov.au/broadband/australian\\_broadband\\_guarantee](http://www.dbcde.gov.au/broadband/australian_broadband_guarantee)>.

<sup>24</sup> DBCDE, *Digital Regions Initiative*, Canberra, 2010, viewed 6 July 2010, <[http://www.dbcde.gov.au/funding\\_and\\_programs/digital\\_regions\\_initiative](http://www.dbcde.gov.au/funding_and_programs/digital_regions_initiative)>.

<sup>25</sup> Eligible organisations include state and territory government departments and agencies, state and territory owned business enterprises, local government, local government business enterprises, business enterprises or other entities jointly owned by state and territory governments and local governments, e.g. new entities or entities owned by and representing a group of state, territory or local government entities, or local government and municipal associations. DBCDE, *Digital Regions Initiative – round two frequently asked questions*, Canberra, 2010, viewed 15 July 2010, <[http://www.dbcde.gov.au/funding\\_and\\_programs/digital\\_regions\\_initiative/digital\\_regions\\_initiativeround\\_two\\_frequently\\_asked\\_questions](http://www.dbcde.gov.au/funding_and_programs/digital_regions_initiative/digital_regions_initiativeround_two_frequently_asked_questions)>.

<sup>26</sup> The projects included Chronic Disease management systems in the Hunter New England region (\$5 million), Justice Health Clinical Outreach Program Phase II in NSW (\$1.265 million), TAFE NSW HEALNet, Online Professional Development for Health Professionals (\$0.881 million) and NSW Ambulance Service Clinical Outreach Program Phase II (\$1.795million). The Hon K Rudd, (Prime Minister) and the Hon S Conroy (Minister for Broadband, Communications and the Digital Economy) 2009, *Digital projects to improve services in regional communities*, media release, Parliament House, Canberra, 10 December; The Hon S Conroy (Minister for Broadband, Communications and the Digital Economy) 2010, *Broadband initiative improving regional health services*, media release, DBCDE, Canberra, 11 January.

### **Clever Networks**

- 2.30 The Clever Networks program was aimed at developing solutions for under-serviced areas by using innovative technologies to maximise existing telecommunications services. The program ended in June 2010 and had total expenditure of \$275 million with \$105 million from Federal funding and the remainder provided by project partner organisations, including state and territory governments.
- 2.31 The first element of the program, Innovative Services Delivery, included 26 co-funded projects to deliver improved services in the sectors of health, education, government and community services and emergency services.<sup>27</sup> The second element, the Broadband Development Network, employed co-funded broadband project managers for each state and 16 project officers across Australia to assist in improving skills, capabilities and business practices in under-serviced communities.<sup>28</sup>

### **Broadband Service Locator**

- 2.32 The Government also provides a free online broadband service locator for consumers so that they can find out what services are available in their area.<sup>29</sup> If there are no metro-comparable commercial broadband services available at a person's premises, then the consumer can register for an Australian Broadband Guarantee subsidised service.

### **New South Wales Government**

- 2.33 The New South Wales Government has three roles to play in the delivery of broadband and telecommunications services. Firstly, it has a responsibility to identify barriers to the implementation of new telecommunications technologies and attempting to instigate their resolution.
- 2.34 Secondly, the New South Wales Government has a role to play in encouraging the take up of new technologies in areas of health, education and justice (such as the Connected Classrooms Program outlined in the following section).
- 2.35 Thirdly, the Government has a role in liaising with federal and local counterparts regarding the roll-out of telecommunications services and the equitable prioritisation of both non-metropolitan and metropolitan areas. In this capacity, the New South Wales Government is represented on the Online and Communications Council, and the National Broadband Development Group.

### **Connected Classrooms Program**

- 2.36 The Connected Classrooms Program (CCP) is an initiative of the New South Wales Government to enhance digital learning capabilities for schools and TAFE colleges through the Department of Education and Training (DET). One of the major benefits

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<sup>27</sup> NSW Health was funded to partner with Area Health Services and Divisions of General Practice in the Hunter New England, Greater Southern, Greater Western, and North Coast areas to improve transmissions of electronic medical health records and images between public hospitals and area healthcare facilities, enabling remote diagnosis and treatment, and providing professional support and development for health workers. DBCDE, *Health Sector*, Canberra, 2010, viewed 22 July 2010, <[http://www.dbcde.gov.au/digital\\_economy/clever\\_networks/health\\_sector](http://www.dbcde.gov.au/digital_economy/clever_networks/health_sector)>.

<sup>28</sup> DBCDE, *Clever Networks*, Canberra, 2010, viewed 7 July 2010, <[http://www.dbcde.gov.au/digital\\_economy/clever\\_networks/clever\\_networks\\_program\\_background](http://www.dbcde.gov.au/digital_economy/clever_networks/clever_networks_program_background)>.

<sup>29</sup> DBCDE, *Australian Broadband Guarantee*, Canberra, 2010, viewed 22 July 2010, <[http://www.dbcde.gov.au/australian\\_broadband\\_guarantee.html](http://www.dbcde.gov.au/australian_broadband_guarantee.html)>.

of the CCP for rural and regional communities is that it offers opportunities for those students in remote areas to take classes using virtual classrooms, thus avoiding the need to travel long distances to their nearest school.<sup>30</sup>

- 2.37 The Program was commenced in March 2007, with \$158 million of funding over four years. DET anticipates that the CCP will be completed during the second half of 2010.<sup>31</sup>

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<sup>30</sup> DET, *Connected Classrooms Program*, Canberra, 2010, viewed 6 July 2010, <[https://www.det.nsw.edu.au/strat\\_direction/schools/ccp/index.htm](https://www.det.nsw.edu.au/strat_direction/schools/ccp/index.htm)>.

<sup>31</sup> Colley, A 2010, *School internet to go fibre-optic 'this year'*, The Australian, 6 July 2010, viewed 15 July 2010, <<http://www.theaustralian.com.au/australian-it/school-internet-to-go-fibre-optic-this-year/story-e6frgakx-1225888236288>>.

## Chapter Three - Perceptions of services

- 3.1 The Committee received 41 submissions from the public in response to this inquiry. The submissions came from a range of organisations and individuals and from a range of rural and regional areas. Concentrations of submissions were received from the North Coast, Central West and South Coast of New South Wales, as shown in Figure 2. As discussed further in Chapter Four, these areas generally correspond with areas of lower levels of broadband use and areas of less mobile phone coverage.



Figure 2 – Local government areas from which submissions were received

- 3.2 The recent Regional Telecommunications Independent Review Committee (RTIRC) report concluded that despite dramatic improvements in telecommunications services in regional Australia that some services, specifically mobile services and the availability of broadband internet are still inadequate in many regional and rural areas.<sup>32</sup> The submissions received to this inquiry confirm this conclusion.

### Issues raised in submissions

- 3.3 It is clear from submissions and evidence received at the hearings that most people regard telecommunications access as a combined issue not just as an issue of broadband or mobile phone services. David Anthony of Communications Planning and Development commented at the hearing on 19 April 2010:

I think at the moment it is quite silly to differentiate between broadband, mobile phone, digital television. They are all converging. It is all the same really.<sup>33</sup>

<sup>32</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, p. xi.

<sup>33</sup> David Anthony, Transcript of Hearing, 19 April 2010, p.10.

- 3.4 In an analysis of the submissions received by the Committee, 28% of submissions addressed mobile telephone services, 18% addressed broadband or internet services, while the majority (54%) addressed both. These results are shown in Figure 3.

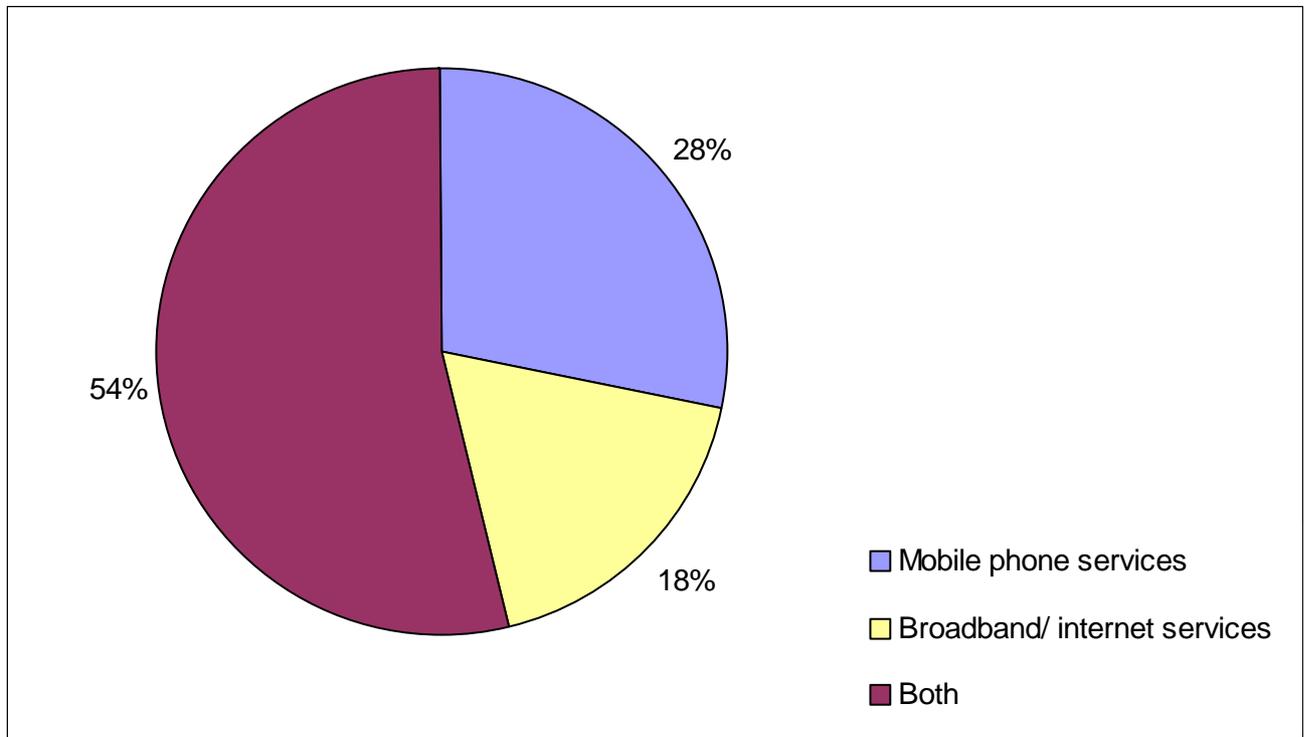


Figure 3 – Classification of submissions by issues addressed

### Mobile phone services

- 3.5 Examining further the submissions that made comment on mobile phone services (including submissions that only addressed mobile phones and those that commented on mobile and broadband services) the most frequently mentioned issue was coverage, or lack of, which was mentioned by 89% of submissions.
- 3.6 For a smaller number of submissions (8%) lack of competition was a significant issue while a further 3% named the ineffectiveness of equipment such as antennas to boost coverage was an issue. These results are shown in Figure 4.

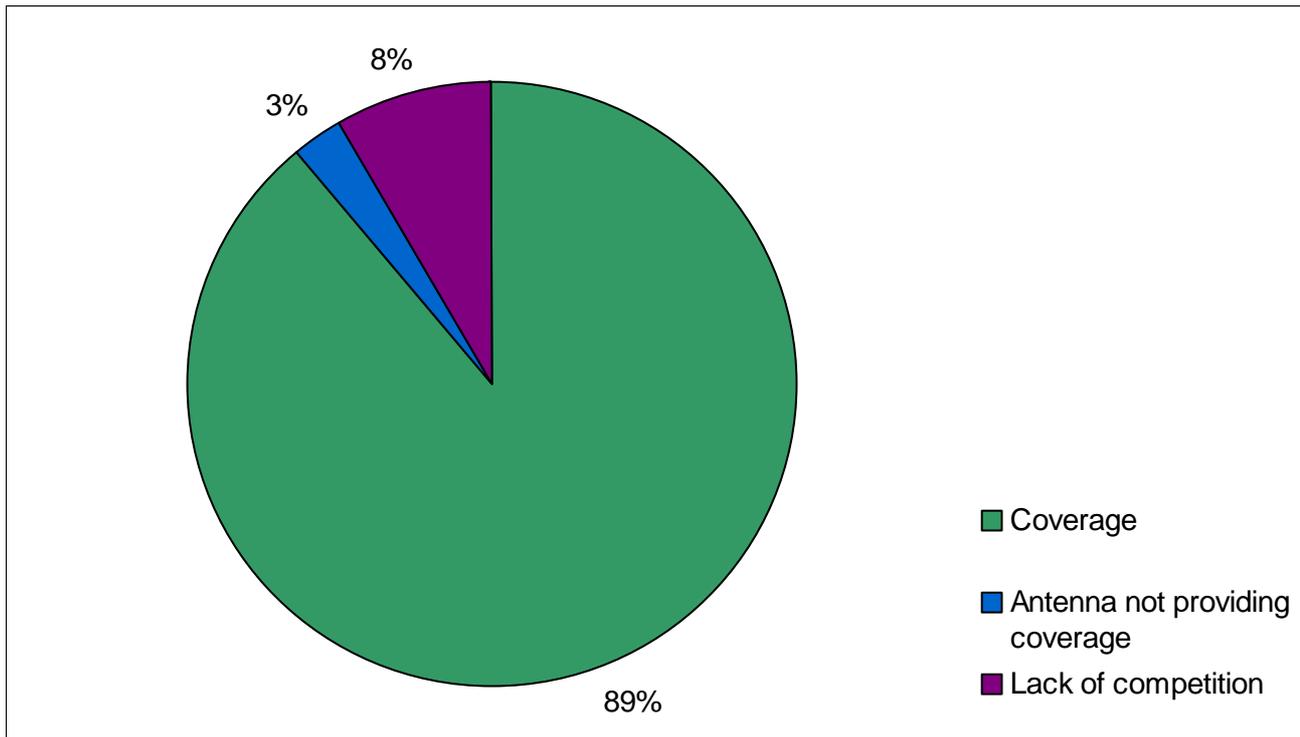


Figure 4 – Issues raised in submissions regarding mobile telephones

3.7 Again, the issues raised with the Committee align with those raised through the RTIRC report:

[M]obile telecommunications issues ranging from problems with handsets, coverage issues and the absence of roaming were raised frequently with the [RTIRC].<sup>34</sup>

### Broadband services

3.8 The concerns raised in submissions regarding broadband highlight lack of access as a main issue, as shown in Figure 5. However, lack of access is experienced differently including: telephone exchanges not enabled for broadband (19% of submissions); capacity issues with both exchanges and lines, for example pair gain issues and lack of copper wiring (26% of submissions); and distance issues, such as people living too far from the exchange (13% of submissions). A further 23% of submissions did not identify the reason for their lack of access to broadband.

3.9 Other submissions also discussed issues regarding satellite broadband being slow and unreliable (13%) and wireless broadband being slow and expensive (6%).

<sup>34</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, p.121.

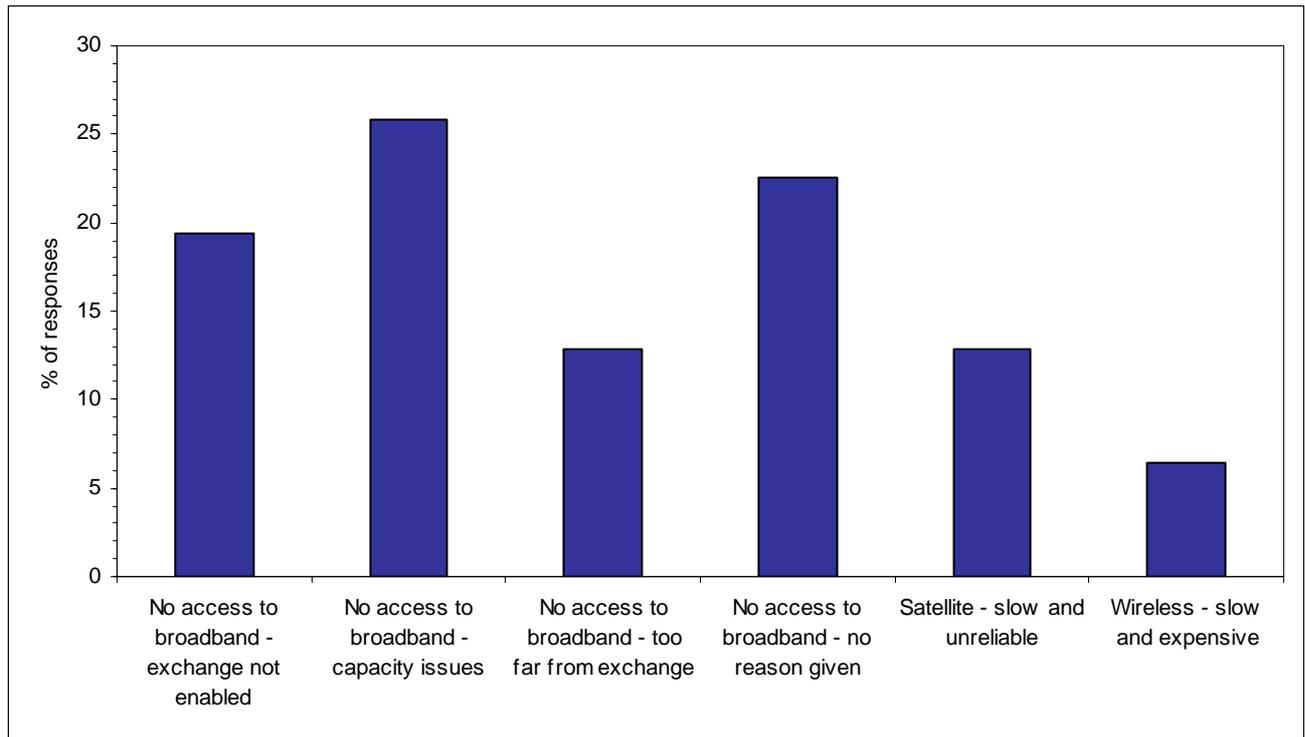


Figure 5 – Issues raised in submissions regarding broadband

## Summary

- 3.10 In summary, the key issues raised in submissions regarding telecommunications availability in regional and rural areas were the lack of coverage of mobile phone services and a number of infrastructure and distance issues associated with broadband internet access.
- 3.11 Chapter Four examines in further detail the current availability of mobile telephone services (including coverage) and levels of broadband internet access. Chapter Five examines the government programs and infrastructure investments that are targeted at improving service delivery in the areas highlighted by the submissions.

## Chapter Four - Current service availability

- 4.1 The mismatch between service expectations and service availability is a key issue in rural and regional telecommunications, as highlighted by the Regional Telecommunications Independent Review Committee (RTIRC):

[C]onsumer expectations are increasing more rapidly than the availability of telecommunications in many areas.<sup>35</sup>

- 4.2 These expectations have not been created by the deliberate misleading of customers, but rather through a lack of provision of quality and accurate information about service availability. The following sections explore this in more depth. The purpose of this chapter is to give more context to the evidence received in the submissions.

### Mobile phone service

- 4.3 As noted in Chapter Three, submissions to the inquiry identified two issues that remain of concern to rural and regional mobile phone users: coverage and competition. Several submissions also highlighted the ineffectiveness of additional equipment (e.g. antennas) in being able to remedy coverage issues despite advice from telecommunications companies.

- 4.4 The importance of the coverage issue is reinforced by recent research conducted by the Australian Communications and Media Authority (ACMA), which highlighted the critical nature of mobile phone communications to people living and working in rural and regional communities.<sup>36</sup>

- 4.5 In research conducted in 2009 into consumer satisfaction of telecommunication services, 11% of non-metropolitan consumers and 10% of metropolitan consumers were unsatisfied with their mobile telephone services.<sup>37</sup> In non-metropolitan areas the largest reasons for this dissatisfaction was bad mobile reception and dropouts (76% non-metropolitan consumers versus 37% of metropolitan consumers). Non-metropolitan customers showed smaller levels of dissatisfaction in other areas such as cost, customer service and billing arrangements than their metropolitan counterparts. This and other reasons for dissatisfaction are presented in Figure 6.

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<sup>35</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, p.6.

<sup>36</sup> ACMA, *Telecommunications Today Report 3: Farming sector attitudes to take-up and use*, Canberra, January 2008.

<sup>37</sup> ACMA, *Communications Report 2008-09*, Canberra, November 2009.

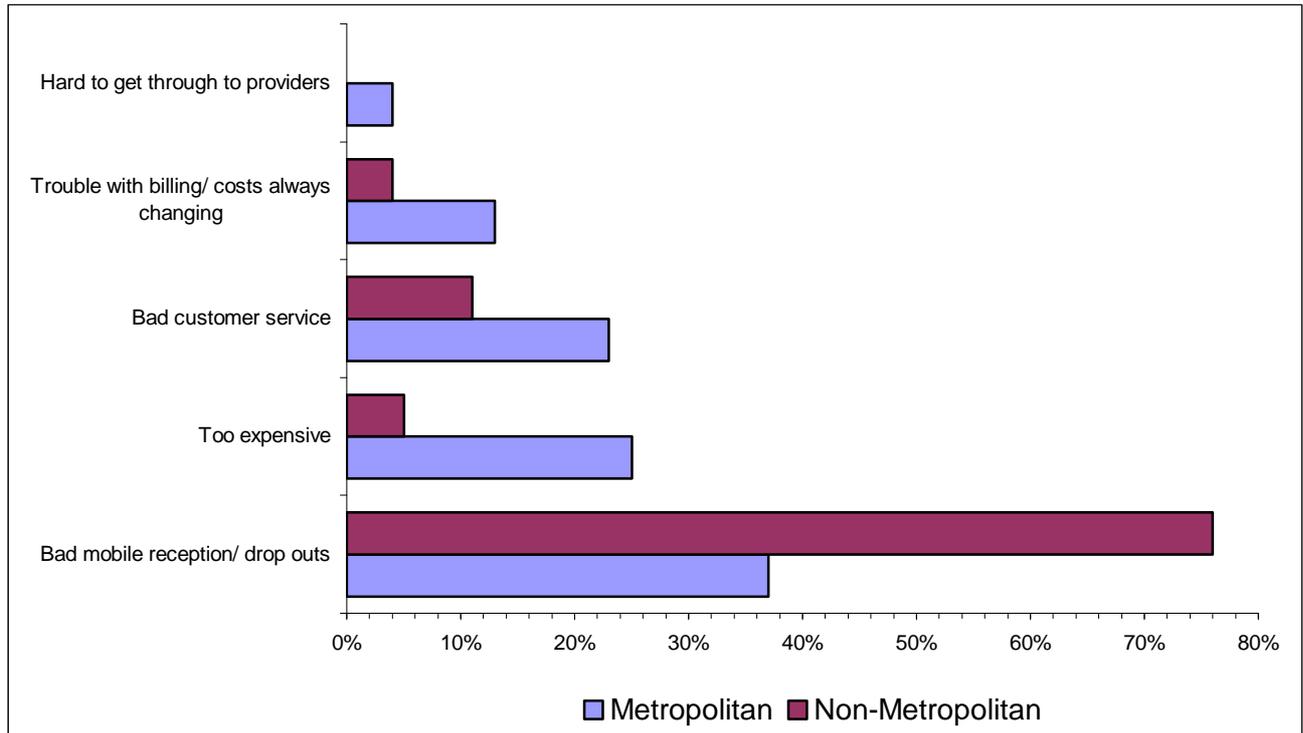


Figure 6 – Reasons for dissatisfaction with mobile telephone services

Source: Modified from ACMA, *Communications Report 2008-09*, Canberra, 2009, p.20

- 4.6 In other research conducted by ACMA in 2009, small and medium enterprises (SMEs) in non-metropolitan areas were found to be more likely to use 3G mobiles than their metropolitan counterparts (65% versus 45%).<sup>38</sup> Research investigating the use of telecommunications by farmers also found that the majority of farmers rated the mobile phone as critical to the business of the farm.<sup>39</sup>

### Movement to 3G networks

- 4.7 Mobile phone services have evolved rapidly in the last few years. Over the 12 months until June 2008 there was an 88% increase in the number of subscriptions to 3G services to 8.55 million.<sup>40</sup> This is largely due to expansions in these networks and the need for customers using the CDMA network to change to another service.
- 4.8 Earlier reports of this Committee detailed the difficult transition period for rural and regional communities with the closure of the CDMA network and transfer of mobile phone services to Telstra's 3G network in April 2008. The main concerns were poor coverage (3G network compared to the previous CDMA network) and a lack of competition (with Telstra being the only provider in large areas of rural and regional Australia).<sup>41</sup>

<sup>38</sup> ACMA, *Convergence and Communications Report 2: Take-up and use of communications by small and medium enterprises*, Canberra, March 2009, p.18.

<sup>39</sup> ACMA, *Telecommunications Today Report 3: Farming sector attitudes to take-up and use*, Canberra, January 2008.

<sup>40</sup> ACMA, *Communications Report 2008-09*, Canberra, November 2009.

<sup>41</sup> Standing Committee on Broadband in Rural and Regional Communities, *Beyond the Bush Telegraph: Meeting the growing communications need of rural and regional people*, Report no. 2/54, New South Wales Legislative Assembly, March 2009, pp. 36-37.

## Mobile phone coverage

- 4.9 According to the latest ACMA report on Communications Infrastructure and Services availability at 30 June 2008:
- 100 % of the population has access to the fixed line telephone network
  - 96 % of the population has access to second generation (2G) GSM mobile phone services from three networks
  - 98.8 % of the population has access to third generation (3G) mobile phone services from three carrier networks.<sup>42</sup>
- 4.10 These service areas correspond to where people live rather than landmass area. This coverage equates to 25% of the Australian land mass, or some 2 million square kilometres. Telstra reported to the RTIRC that as at February 2008, mobile phone coverage in approximately half of this 2 million square kilometres, which equates to around 13% of the Australian land mass, also requires the use of external antennas to achieve coverage.<sup>43</sup>
- 4.11 Mobile phones must be within range of a fixed tower or base station to function. Terrain such as hills, mountains and valleys can result in some areas not receiving coverage, despite proximity to a tower (this can occur in metro and outer metro areas as well). The base station or tower must also link back into the network. This is achieved through a 'backhaul link', either by radio/ microwave or fibre. Therefore coverage depends not only on the geographical locations of the handset and its proximity to a tower, but the backhaul link of the tower to the rest of the network. For satellite phones line of sight to the satellite is required, so satellite phones will generally not work inside buildings.
- 4.12 Telstra's advice to the RTIRC is that handheld coverage is exposed to additional factors influencing performance including obstacles, device grip, and impacts of mobility, and for these reasons, Telstra makes no specific claim to handheld landmass area or population coverage.<sup>44</sup> The RTIRC notes the serious mismatch between the impression given by the industry of mobile phone coverage and the reality of less than 15% coverage of the landmass for handheld devices.<sup>45</sup>
- 4.13 Despite this knowledge, coverage maps and quotations of figures such as '98.8% of the population can receive coverage' continue to lead to the general expectation that most of the population will be able to receive coverage. The RTIRC identified this as a key factor leading to rural and regional dissatisfaction with mobile phone services. They made the following recommendation in their report:
- The Australian Government takes the necessary action to improve consumer understanding of handheld mobile coverage. At a minimum, this must include a requirement for the telecommunications provider to consistently, clearly and accurately inform consumers, at time of purchase, of handheld landmass or geographic coverage.<sup>46</sup>
- 4.14 The Federal Government's response to the RTIRC recommendation was to engage with consumer groups such as Australian Communications Consumers

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<sup>42</sup> ACMA, *Communications Report 2008-09*, Canberra, November 2009.

<sup>43</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, p.125.

<sup>44</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, pp.125.

<sup>45</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, p.126.

<sup>46</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008, Recommendation 2.1.3, p.143.

Action Network (ACCAN) to increase consumer education about likely service levels.<sup>47</sup> The Federal Government's work with ACCAN is ongoing, but the constant dissatisfaction of rural and regional consumers with service availability meeting their expectations may require increased activity to ensure consumers have accurate and adequate information when selecting telecommunications services. This is reinforced by ACCAN's submission to this inquiry:

There is a need for greater accuracy and accountability of coverage claims made by providers, and more importantly, greater mobile coverage is needed.<sup>48</sup>

**RECOMMENDATION 1:** The New South Wales Government continues to encourage the Federal Government to improve and promote information and knowledge of mobile phone service availability in regional and rural areas to aid consumers decision making.

## Broadband

4.15 Over the last decade there has been a rapid increase in the use of internet within Australia. The latest figures from the Australian Bureau of Statistics (ABS) show that in December 2009 there were over 9.1 million active internet subscribers in Australia. Of these, 1.65 million were businesses and government while the remaining 7.46 million were households. This has risen from 3.8 million subscribers in September 2000, as illustrated in Figure 7.

<sup>47</sup> DBCDE, *Regional Telecommunications Review Government Statement of Response*, Canberra, March 2009.

<sup>48</sup> Submission 38, ACCAN, p.6.

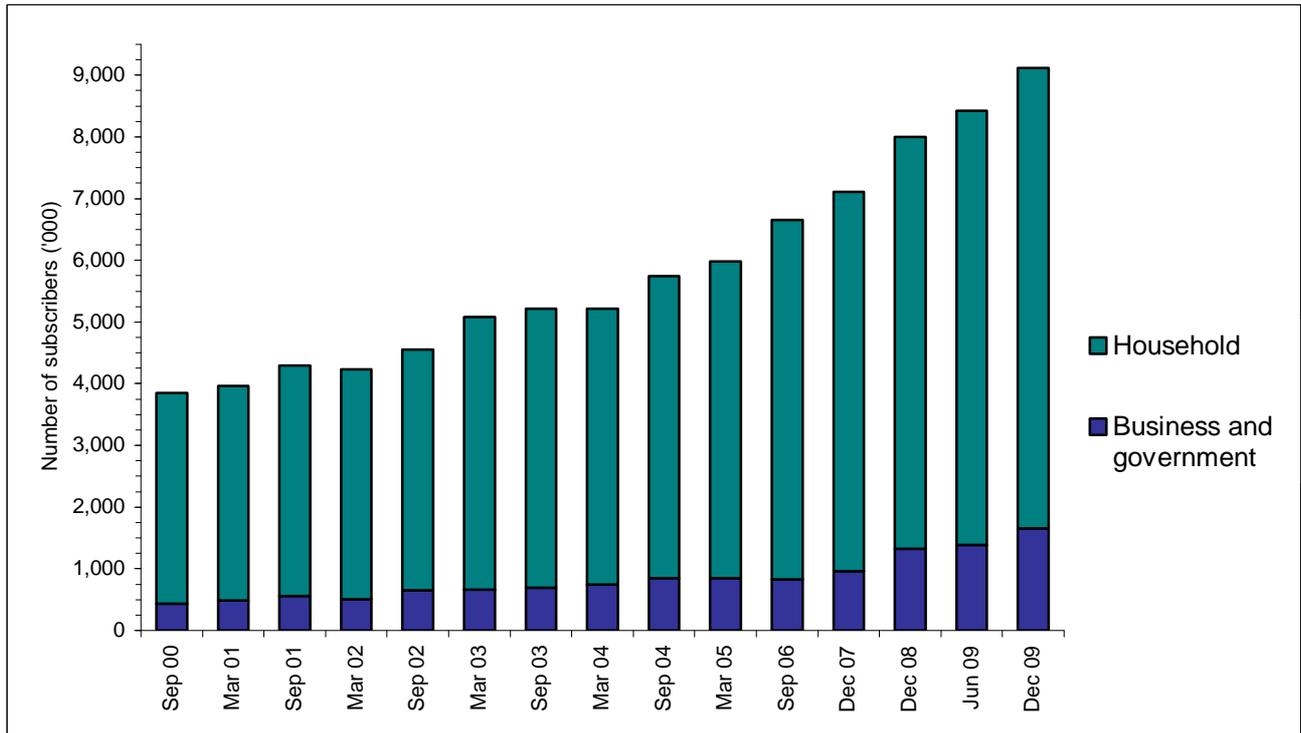


Figure 7 – Number of internet subscribers in Australia

Source: Australian Bureau of Statistics, Internet Activity (8153.0), 2000-2010

Note: Results from June & December 2009 are only from internet service providers with more than 1000 active subscribers, whereas all previous results included all internet service providers.

4.16 In December 2009, 89.7% of all internet subscribers used broadband (defined by the ABS as speeds of greater than 256 kbps). The proportion of internet subscribers with broadband has increased significantly from September 2003, when only 12.6% of internet subscribers had broadband access. This trend is illustrated in Figure 8.

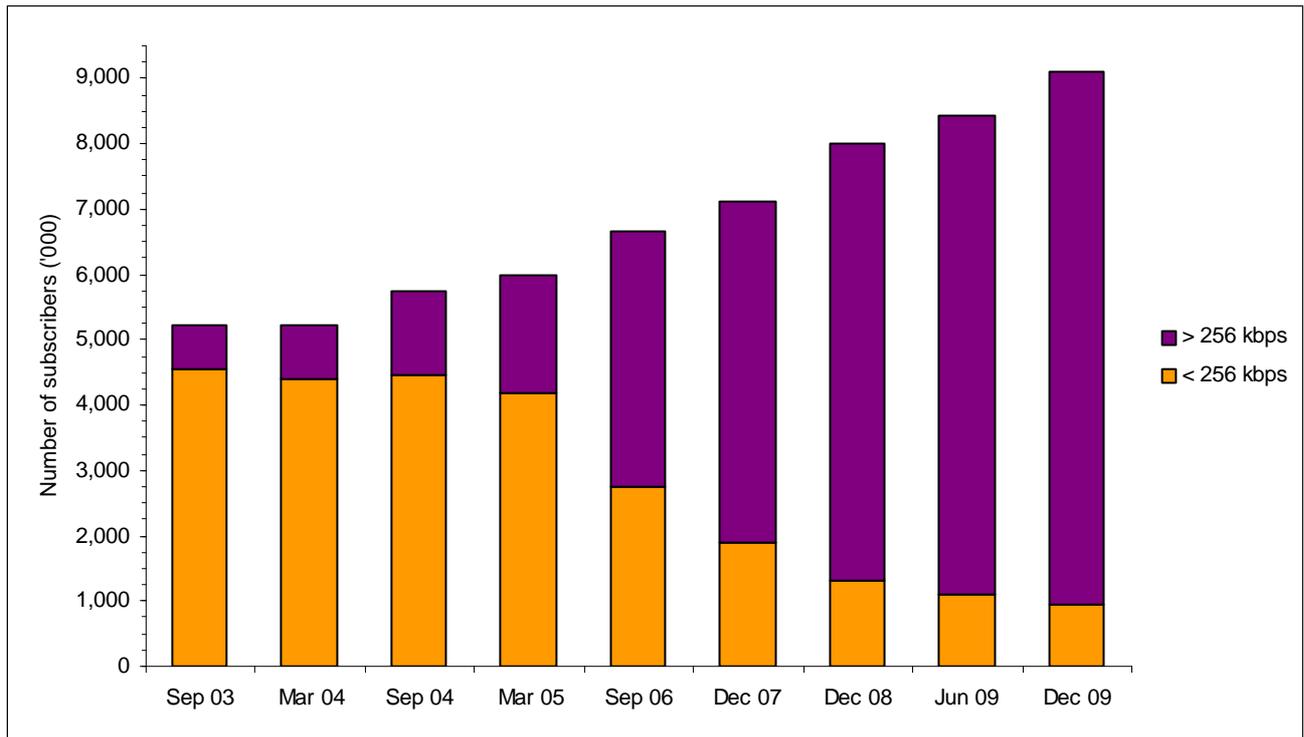


Figure 8 – Number of internet subscribers with broadband access in Australia

Source: Australian Bureau of Statistics, Internet Activity (8153.0), 2000-2010

Note: Results from June & December 2009 are only from internet service providers with more than 1000 active subscribers, whereas all previous results included all internet service providers.

4.17 As illustrated in Figure 9, internet access in Australia is currently dominated by DSL and mobile wireless. Of all internet subscribers in Australia in December 2009:

- 46.0% used DSL;
- 31.1% used mobile wireless;
- 10.3% used cable or fibre;
- 10.2% used analog dial-up;
- 1.2% used satellite;
- 1.2% used fixed wireless.<sup>49</sup>

<sup>49</sup> ABS, 2010, 8153.0 - Internet Activity, Australia, December 2009, media release, Canberra, 30 March.

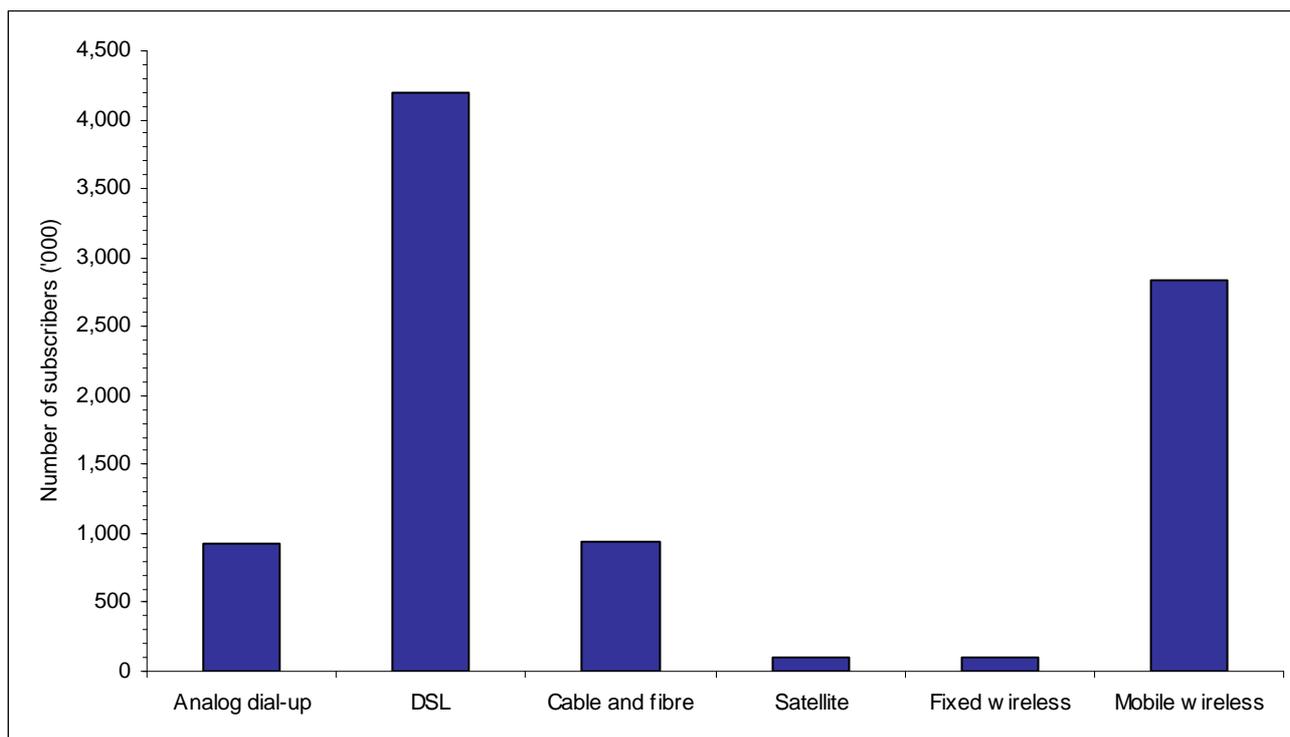


Figure 9 – Access connections of internet subscribers in Australia

Source: Australian Bureau of Statistics, Internet Activity (8153.0), 2010

- 4.18 Despite these rapidly increasing levels of internet connection the so-called ‘digital-divide’ between metropolitan and non-metropolitan communities is still evident. A previous publication by the Committee, *Beyond the Bush Telegraph*, found that non-metropolitan households are much less likely (54% less likely in outer regional, 53% less likely in remote and 59% less likely in very remote areas) to have a broadband internet connection.<sup>50</sup>
- 4.19 Data from the 2006 Australian census shows that the vast majority of local government areas in rural and regional areas have a high proportion (>40%) of their populations with no internet connection, as illustrated in Figure 10. Additionally, Figure 11 shows low levels of broadband internet penetration in rural and regional New South Wales. No doubt these figures have changed since the census data was last collected, but further evidence of the continuing ‘digital divide’ is found in more recent research.

<sup>50</sup> Standing Committee on Broadband in Rural and Regional *Beyond the Bush Telegraph: Meeting the growing communications need of rural and regional people*, Report no. 2/54, New South Wales Legislative Assembly, March 2009, pp.19-22.

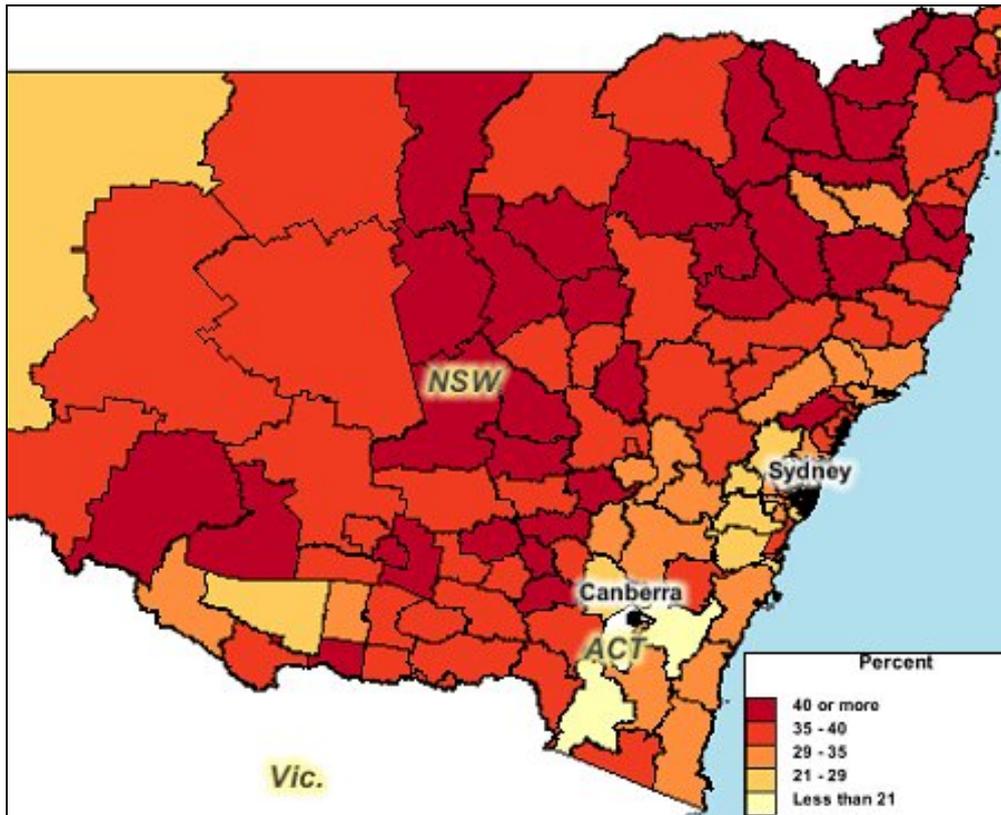


Figure 10 – Percentage of households in New South Wales with no internet connection

Source: Australian Bureau of Statistics, Census of Population and Housing, 2006

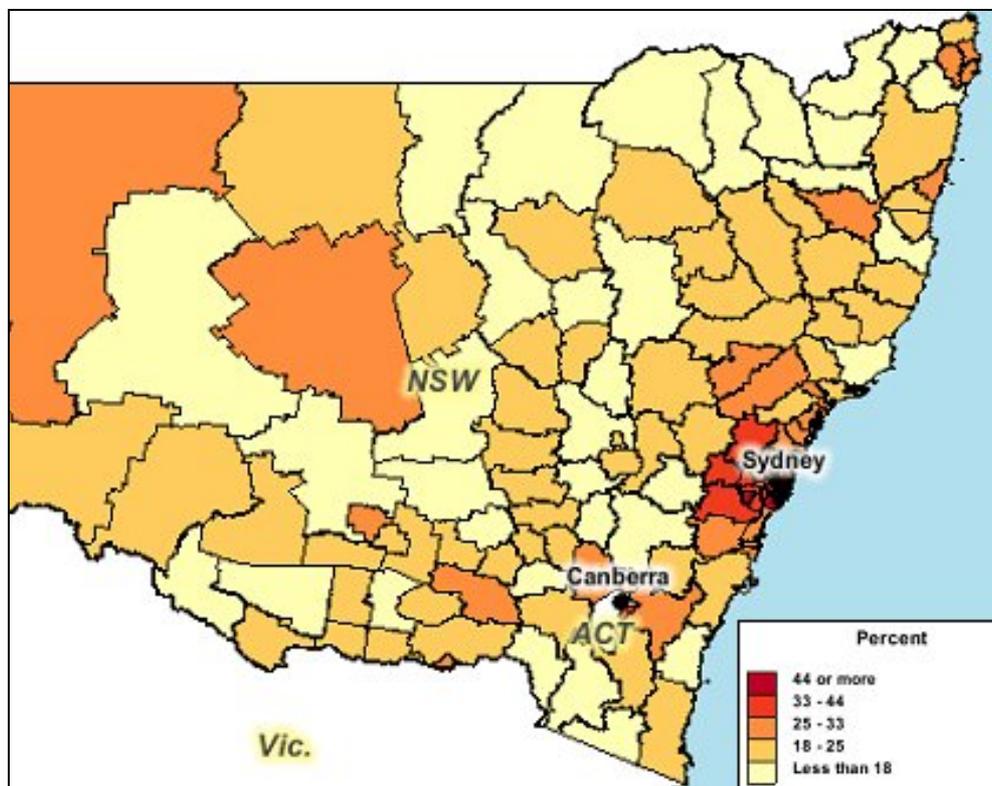


Figure 11 – Households in New South Wales with a broadband connection

Source: Australian Bureau of Statistics, Census of Population and Housing, 2006

Chapter Four

- 4.20 The ACMA study into '*Farming sector attitudes to the take-up and use of Telecommunications*' showed that just under half of the farm respondents (47%) had an internet connection in 2008.<sup>51</sup> The majority of these connections were satellite connections (49%), followed by ADSL (22%) and wireless (6%).
- 4.21 Of the farms that did not have broadband (53% of the sample), 80% of these indicated they would like a broadband connection. When asked the reasons for not having a broadband connection 65% of non-broadband farms thought that they could not access broadband because they lived too far away from the exchange or that it was not available in their area. The expense of broadband was cited as a reason for not having a broadband connection in only 16% of the farms.
- 4.22 The ACMA study further noted that the major uses of the internet by farmers were to gain access to: weather information (47%), banking (47%), agricultural information (28%), market financial information (26%), livestock and machinery market information (24%) and email (23%).<sup>52</sup>
- 4.23 These online activities are broadly similar to overall SME internet activity. SMEs make up 99% of the firm population in Australia. In 2009 the *Sensis e-business* report found the main use of the internet by SMEs was to communicate via email (97%), gather information about products and services (92%), source reference information or research data (91%), conduct internet banking (86%), access and use online catalogues (78%), and to place orders for products and services (78%).<sup>53</sup>
- Other research by the ACMA in 2009 provides further insight into the use of the internet by SMEs.<sup>54</sup>
- 4.24 Figure 12 presents a metropolitan and non-metropolitan breakdown of SME internet activities. There is not a great deal of difference between the type of internet activities but rather the intensity of use; particularly the use of the internet for business promotion, monitoring of competition and communications with customers and staff. The only category where non-metropolitan firms had higher usage rates than metropolitan firms was in using the internet to place orders for products and services. This is most likely a result of their remote location.

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<sup>51</sup> ACMA, *Telecommunications Today Report 3: Farming sector attitudes to take-up and use*, Canberra, January 2008, p.9.

<sup>52</sup> ACMA, *Telecommunications Today Report 3: Farming sector attitudes to take-up and use*, Canberra, January 2008, pp13-14.

<sup>53</sup> Sensis, *e-business Report: The online experience of small and medium sized enterprises*, August 2009, p.13.

<sup>54</sup> ACMA *Convergence and Communications Report 2: Take-up and use of communications by small and medium enterprises* March 2009, Canberra, p.25.

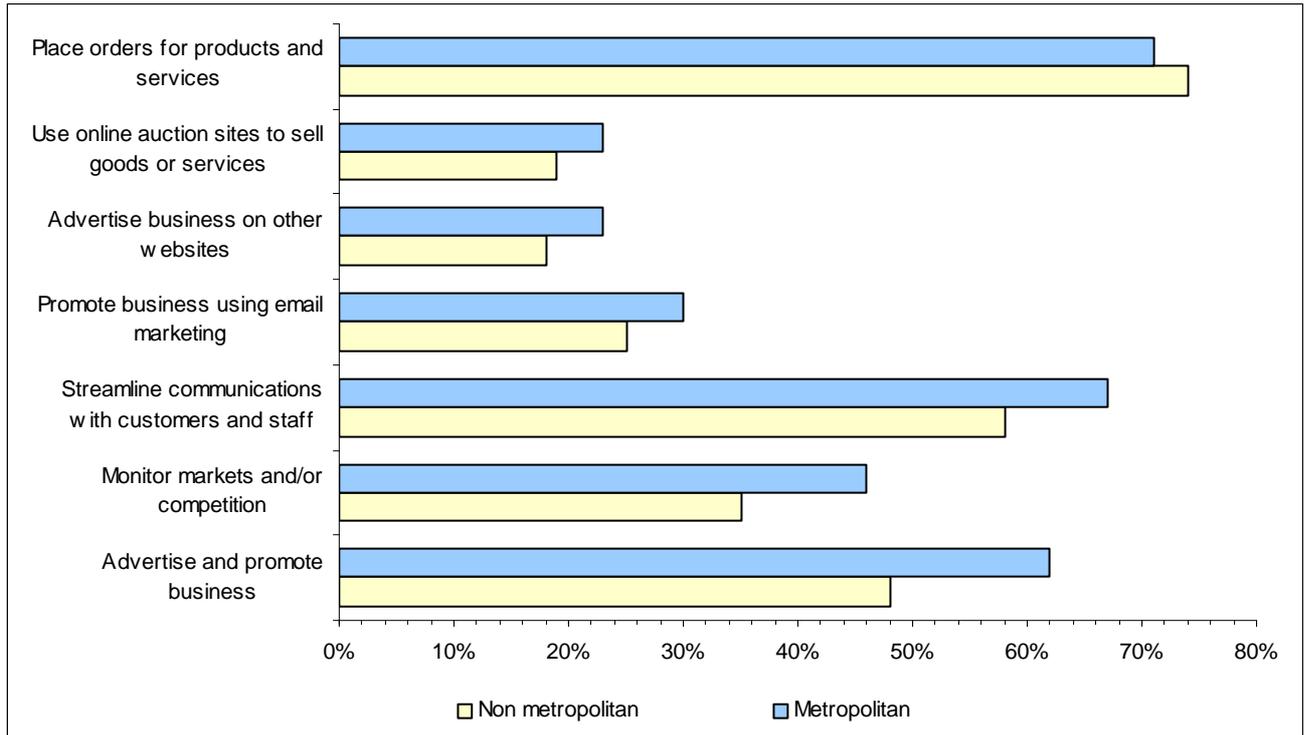


Figure 12 – SME internet use in metropolitan and non-metropolitan areas

Source: Modified from ACMA, *Convergence and Communications Report 2: Take-up and use of communications by small and medium enterprises*, Canberra, 2009, p. 25

## ADSL broadband technology

- 4.25 As noted previously, the most popular type of broadband is DSL broadband. The most prevalent type of DSL broadband is ADSL or asymmetrical digital service line broadband. ADSL has a download transmission rate that is much faster than the upstream transmission rate, hence the asymmetrical name.
- 4.26 Telstra records note that at 31 May 2010 there were 8,655 ADSL enabled exchanges in Australia with 2,832 of these in New South Wales. The previous Committee report, *Beyond the Bush Telegraph*, reported 3,000 ADSL enabled exchanges operating in May 2008. In two years an additional 5,655 exchanges have been installed or enabled for ADSL, resulting in an increase of 188%. Figure 13 illustrates the current geographical spread of ADSL enabled exchanges in Australia.

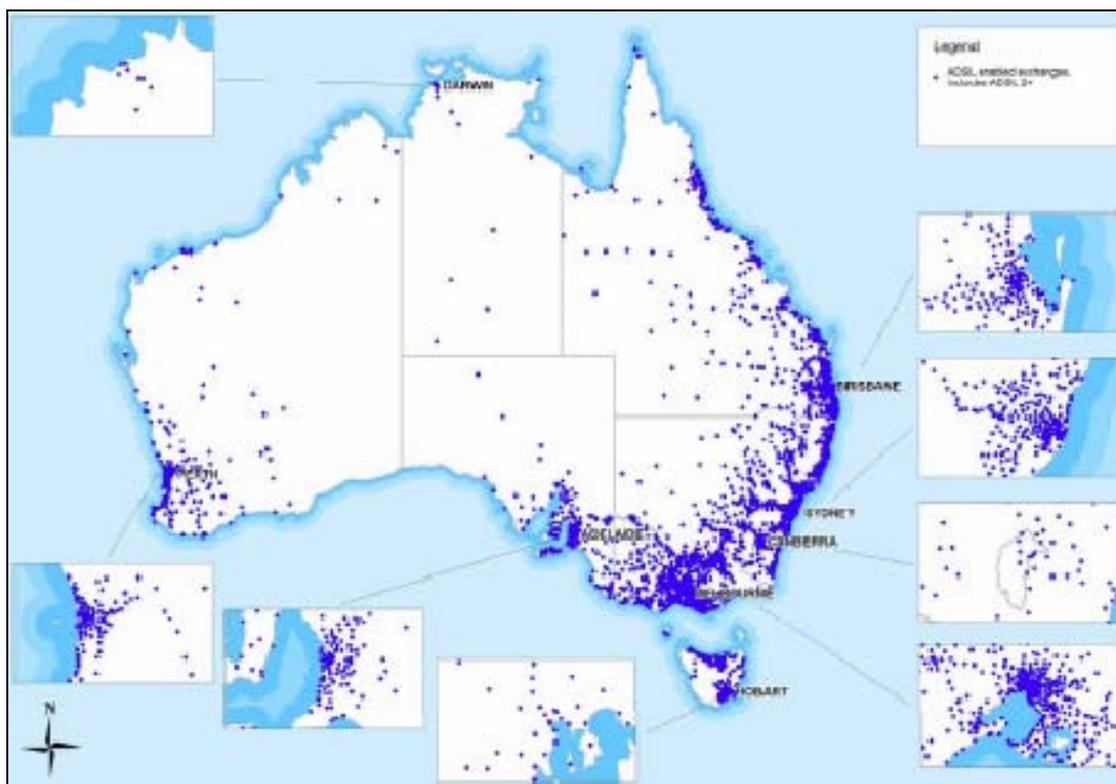


Figure 13 – ADSL enabled exchanges in Australia

Source: ACMA and ACCC, *Communications Infrastructure and Services Availability in Australia 2008*, ACMA, Melbourne, 2008, p.8

## Movement to ADSL2+

- 4.27 ADSL2+ technology also has more availability than at the time of the publication of the Committee’s last report. Telstra records note that at the end of May 2010 there were 1,879 ADSL2+ enabled exchanges, 513 of which are in New South Wales.<sup>55</sup> This is an increase of 1,479 ADSL2+ enabled exchanges from the 2007 figures in the previous Committee report *Beyond the Bush Telegraph*. This represents an increase of 370%.
- 4.28 ADSL2+ services can effectively provide double the download transmission rates of ADSL technology. ACMA research recorded ADSL2+ download speeds of up to 24 Mbps although speeds greater than 12 Mbps are only available within 1.5 kilometres of the exchange.<sup>56</sup> The same ACMA analysis found that 48% of the population live within 1.5 kilometre of an ADSL2+ enabled exchange. Figure 14 shows the geographical spread of ADSL2+ enabled exchanges.

<sup>55</sup> Telstra, *ADSL Information*, Canberra, 2010, viewed 13 July 2010, <<http://www.telstrawholesale.com/products/data/adsl-reports-plans.htm>>.

<sup>56</sup> ACMA, *Communications Report 2008-09*, Canberra, November 2009.

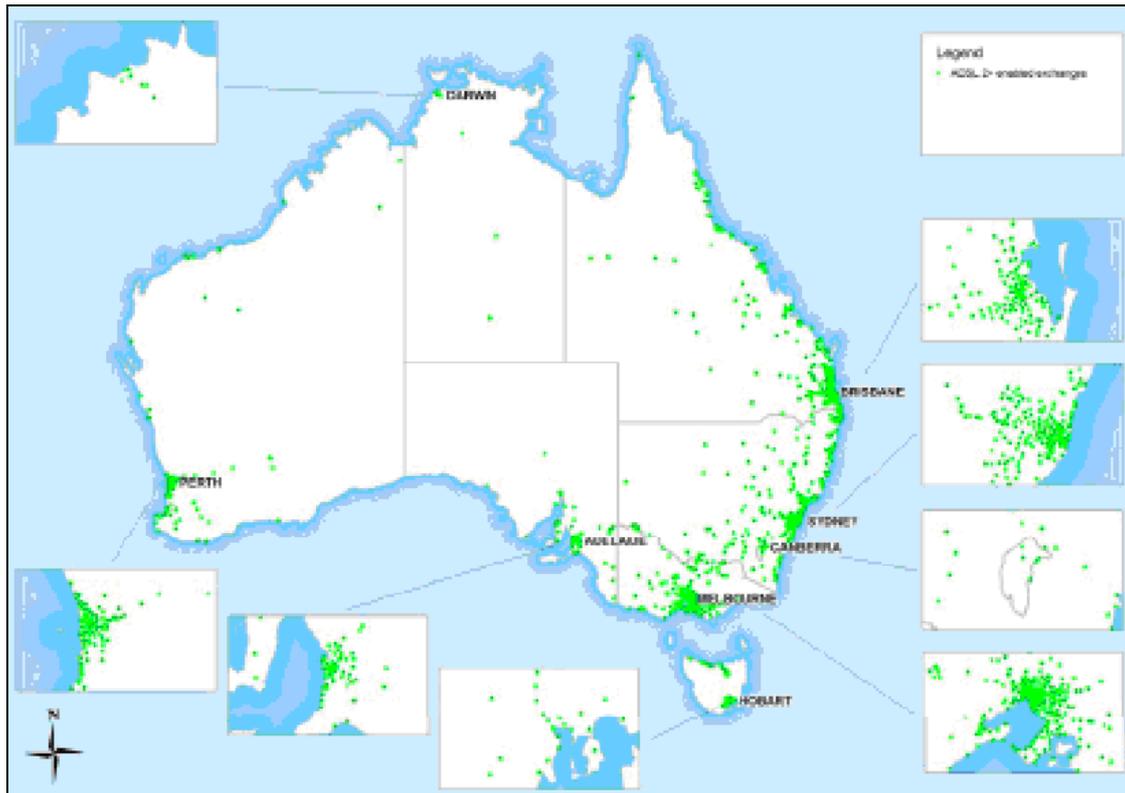


Figure 14 – ADSL 2+ enabled exchanges in Australia 2008

Source: ACMA and ACCC, *Communications Infrastructure and Services Availability in Australia 2008*, ACMA, Melbourne, 2008, p.9

## Broadband blocks

- 4.29 Previous reports of, and submissions to, this Committee have highlighted the damaging effect of pair gain systems. Pair gain is a method of transmitting telephone signals over the twisted pairs traditionally used for a single traditional subscriber line. Pair gain has the effect of creating additional subscriber lines and has been used as an expedient method to solve line shortage problems by using existing wiring instead of installing new lines. This technique has been extensively used in new greenfield housing developments.
- 4.30 Pair gain lines are not compatible with DSL systems and therefore households with pair gain wiring are not able to access DSL broadband services. It is estimated that up to 1.2 million pair gain systems were in operation in Australia in the early 2000s.<sup>57</sup> At a public hearing in November 2008 on the implications of the proposed NBN, held by the Senate Select Committee on the National Broadband Network, Mr David Quilty, Group Managing Director, Public Policy, Telstra, told the Committee that Telstra had removed a number of pair gain systems, particularly the larger ones.<sup>58</sup> However, despite this, there remains a large number of pair gain systems in operation in Australia.

<sup>57</sup> Senate Environment, Communications, Information Technology and the Arts Reference Committee, *The Australian Telecommunications Network*, Senate Printing Unit, Parliament House, Canberra, August 2004.

<sup>58</sup> Australia, Senate Select Committee on the National Broadband Network, 11 November 2008, *Official Committee Hansard*, p.9.

4.31 Other factors of telecommunications infrastructure have also led to constrained broadband access to households and businesses. These include the quality of the copper line to residences (services degrade on poor quality lines) and the capacity of exchanges (exchanges that are full cannot offer other telecommunications services to households and businesses until the exchange is upgraded).

Available speeds

4.32 The ABS has identified a shift towards the adoption of higher download speeds in their statistics on internet use. In December 2009, nearly 5.7 million subscribers were using a 1.5 Mbps or faster service which represented 62.5% of all subscribers. In March 2005 only 599,000 subscribers, or 10.0% of all subscribers, were using a 1.5 Mbps or faster service. The increase in faster speeds is illustrated in Figure 15.

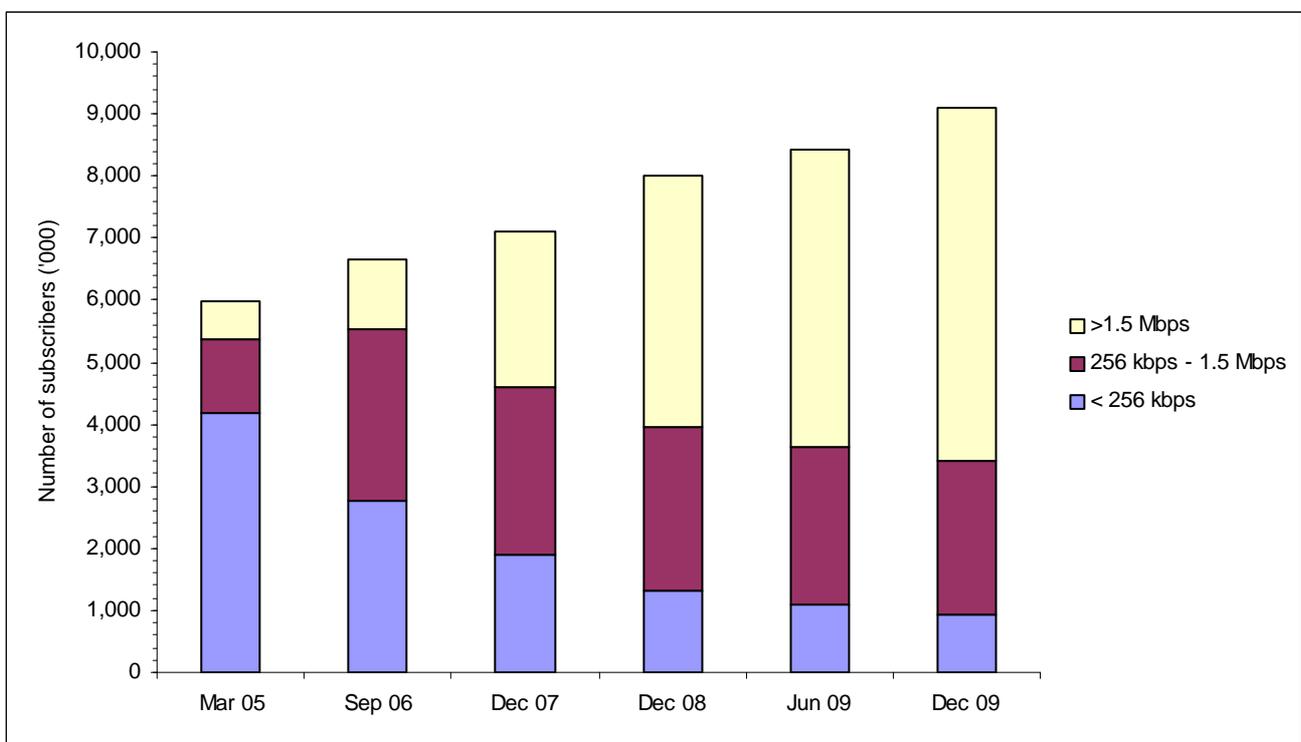


Figure 15 – Connection speeds of subscribers

Source: Australian Bureau of Statistics, Internet Activity (8153.0), 2000-2010

Note: Results from June & December 2009 are only from internet service providers with more than 1000 active subscribers, whereas all previous results included all internet service providers.

4.33 The quoted internet speeds relate to the access network only. In fact, the connection speed that end users actually experience is determined by the slowest link in the end-to-end connection. The slowest link can often be the remote connect service (website) or influenced by the user’s distance from the exchange or the quality and traffic on the line that connects the user to the network (otherwise known as last mile infrastructure). ADSL services are a distance-based technology, this means that the further a user is away from the exchange the slower the service becomes.

- 4.34 The fibre based NBN system will eliminate these problems and is seen as one of the key benefits of the NBN system.<sup>59</sup>

## Costs

- 4.35 Price and speed are the main areas where internet services in regional and rural areas are not comparable with metropolitan services. As in the case for mobile phones, lack of competition and the cost of providing infrastructure are the main causes of this inequitable service delivery. In most regional and rural areas Telstra is the only service provider. Local ISPs (internet service providers) need to purchase wholesale services from Telstra and the price of these services is largely determined on the cost of deployment of a service and the volume of traffic carried. In rural and regional areas there will be higher deployment costs and lower (than metro areas) volumes of traffic. This means overall higher costs.
- 4.36 Telstra's retail pricing policy, however, is uniform across Australia. Where there is a lot of competition (such as in metro areas) other ISPs are able to offer more competitive services than Telstra (in fact they have an economic imperative to do so) but in regional areas, because of the wholesale pricing arrangement, Telstra's internet services are most likely the only (or least costly) services in rural and regional areas.<sup>60</sup>
- 4.37 In general, Australian consumers pay very different amounts for broadband services. Figure 16 provides an international comparison of the range of broadband prices in OECD countries based on megabits per second (Mbps) rate in \$US adjusted for purchasing price parity. Australia's range goes from some of the lowest prices (US\$0.92 per Mbps) to the highest (US\$160.96 per Mbps). These figures include broadband from all platforms; so will include broadband accessed by satellite. The figure does show that broadband costs can significantly limit equitable access to broadband between metropolitan and non-metropolitan regions.

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<sup>59</sup> Senate Select Committee on the National Broadband Network, *Interim Report*, Parliament House, Canberra, December 2008, p.87.

<sup>60</sup> Telstra, *Telstra Response to Backhaul Blackspots Initiative Stakeholder Consultation Paper*, Canberra, May 2009, p.9.

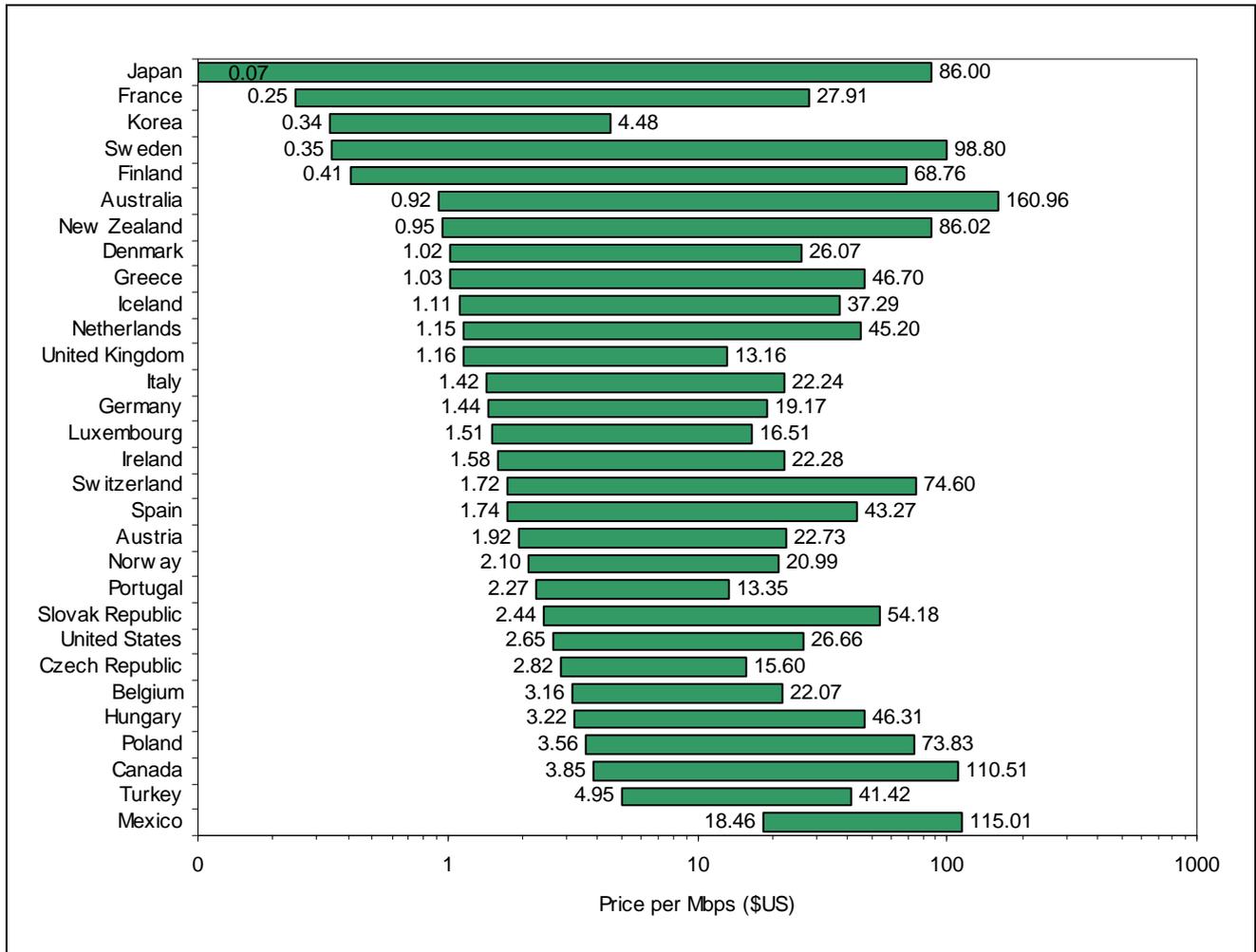


Figure 16 – Range of international broadband prices per Mbps

Source: Organisation for Economic Co-operation and Development, *Communications Outlook 2009*, viewed 13 July 2010, <[www.oecd.org/sti/telecom/outlook](http://www.oecd.org/sti/telecom/outlook)>  
Logarithmic scale, \$US purchasing price parity

### Wireless broadband

4.38 In December 2009, 32.3% of all internet connections in Australia were delivered via wireless broadband.<sup>61</sup> Two platforms of wireless broadband are currently used, fixed access wireless and mobile wireless. Fixed access wireless (which accounted for 1.2% of all connections, as shown in Figure 9) uses air as an interface, alternative to other access media (such as copper or fibre) to conduct the last-mile transmission of broadband services. Mobile wireless (which accounted for 31.1% of all connections, as shown in Figure 9) connects broadband customers using the 3G mobile telephone network.

4.39 From the submissions received, it appears that wireless broadband is a popular means of accessing broadband internet services. However, the submissions also note a number of limitations of wireless broadband: cost and speed. Wireless internet services are seen as being more expensive, slower and with lower

<sup>61</sup> ABS, 8153.0 - *Internet Activity, Australia, December 2009*, Canberra, March 2010.

download limits than ADSL broadband services, although less expensive than satellite broadband.<sup>62</sup>

4.40 The availability and quality of both fixed access and mobile wireless broadband are limited by three factors:

- Contention – there is a limited spectrum available for all users served by each radio transmitter/ receiver.
- Radio frequency interference – this is particularly the case when services are offered in unlicensed spectrums.
- Backhaul – wireless internet connections will be restricted by backhaul network links in the same way that mobile phone coverage is affected.

4.41 These service limitations can be overcome by creating smaller access networks (or mobile cells) but this would require the construction of more base stations.<sup>63</sup> Wireless broadband infrastructure development is discussed further in the following chapter.

**RECOMMENDATION 2:** The New South Wales Government continues to encourage improved broadband services for regional and rural communities by working with the Federal Government to ensure new infrastructure is directed to currently under-serviced areas.

<sup>62</sup> ACMA, *Telecommunications Today Report 3: Farming sector attitudes to take-up and use*, Canberra, January 2008, p.15.

<sup>63</sup> ACMA, *Communications Infrastructure and Services Availability*, Canberra, 2008, p.10.

## Chapter Five - Improving access and infrastructure

- 5.1 This chapter examines how issues of availability are being dealt with now and into the future, particularly through plans for the National Broadband Network (NBN). Specific government responses to these three issues, mobile coverage, broadband infrastructure and distance, are examined for the short-term and the medium-to long-term future.

### Government strategies and programs

- 5.2 With the full privatisation of Telstra, the ongoing availability of equitable telecommunications services to rural and regional customers has been a focus of Federal Government regulation.
- 5.3 One of the key steps in establishing this regulatory framework was the establishment of the Regional Telecommunications Independent Review Committee (RTIRC), chaired by Dr Bill Glasson AO. The Committee completed its first report into adequate telecommunications services in regional, rural and remote communities in 2008.<sup>64</sup> The RTIRC recommended \$40-\$60 million worth of government investment into rural telecommunications service initiatives as well as Federal Government legislation. Government programs associated with this expenditure have been outlined in Chapter Two.

### Improvements to mobile phone coverage

- 5.4 The mobile phone landscape in Australia is highly competitive. Currently three carriers compete for consumers: Telstra, Optus and Vodaphone/Hutchinson/3. However, in regional and rural areas there is usually only one carrier available, Telstra.
- 5.5 Improvement in coverage is driven by a number of factors. The two main areas of activity are: competition, although this is mainly restricted to metropolitan areas; and current and past government subsidy and investment programs, targeted mainly in rural and regional areas. Some \$145 million has been spent on upgrading terrestrial mobile phone infrastructure in rural and regional areas since 2001.<sup>65</sup> This infrastructure has resulted in new or improved coverage to 560 towns and districts, 62 lengths along 34 highways and near continuous coverage along 10,000 kilometres of national highways.
- 5.6 The economic feasibility of investments in extending coverage underpins the decision to increase coverage. The cost of extending coverage of networks includes not only the cost of the mobile phone transmission towers, but also recurrent expenditure such as power, maintaining access roads, radio transmission equipment and backhaul links to the network. These costs can be considerable, particularly when the terrain and environmental conditions are challenging. Other costs associated with providing coverage to new areas include building new infrastructure such as roads and electrical power sources.
- 5.7 The rollout of the NBN presents an opportunity to provide some of this associated infrastructure, such as roads and power sources. The provisions of this infrastructure

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<sup>64</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008.

<sup>65</sup> RTIRC, *Framework for the Future Report*, Canberra, September 2008.

will significantly reduce the costs of service provision to new areas and therefore may stimulate commercial telecommunications companies to operate in new areas. The NBN also provides the ability to upgrade backhaul links to the network, which should also have the effect of upgrading mobile phone services.

## Improvements to broadband

### Fibre network

- 5.8 One of the foremost benefits of a fibre broadband network over the current copper ADSL system will be the move away from distance-limited internet technology. ADSL technology, or any technology that relies on copper wires for delivery is distance-limited; the further a household or business is away from the telephone exchange there is a corresponding reduction in service quality.
- 5.9 Therefore for the 93% of the population that will be within the NBN fibre footprint, capacity and distance issues (such as pair gain issues or being located too far from an exchange) that currently limit ADSL broadband access will be alleviated.
- 5.10 The Committee notes that the rollout period for the NBN is eight years, so these issues will not be immediately resolved. In mitigating current limitations, Telstra has removed a number of pair gain systems, particularly in rural areas, when systems break. However, removal of pair gain systems appears to be done when commercially beneficial.<sup>66</sup>

**RECOMMENDATION 3:** The New South Wales Government works with the Federal Government to ensure the National Broadband Network rollout gives a high priority to areas currently without terrestrial broadband services and consults with local communities to ensure the rollout can be tailored to deliver maximum benefit to these less serviced populations.

- 5.11 Earlier this year the Federal Government announced its intention to legislate that new housing developments are to be made fibre-ready from the start. On 18 March 2010 the Federal Government introduced the *Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010*.<sup>67</sup> Since then, associated reports and consultation processes<sup>68</sup> have commenced with the aim to have the legislative framework in place by 1 January 2011.

### Non-fibre options

- 5.12 For 7% of the population a fibre link to the NBN will not be possible (due to the cost of supply). As discussed in paragraph 2.17 broadscale maps identifying which areas will be included in the fibre footprint and which will not have been released, as shown

<sup>66</sup> Australia, Senate Select Committee on the National Broadband Network, 11 November 2008, *Official Committee Hansard*, p.9.

<sup>67</sup> The Hon S Conroy (Minister for Broadband, Communications and the Digital Economy) 2010, *Superfast broadband for new developments*, media release, DBCDE, Canberra, 18 March.

<sup>68</sup> Senate Committee on Environment, Communications and the Arts, *Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010 [Provisions]*, Senate Printing Unit, Parliament House, Canberra, May 2010; DBCDE, *National Broadband Network: Fibre to the premises in greenfields estates consultation paper*, Canberra, May 2009.

in Figure 1. As predicted, the areas outside the fibre network include those that are “truly remote areas, small regional towns, outskirts of large regional towns and urban fringes”.<sup>69</sup>

- 5.13 While the recently released maps indicate the general areas that will fall within the fibre, fixed wireless and satellite networks, there is no detailed information on the specific extent of these options or the timing for delivery. This lack of information is leading to further frustration within regional and rural communities about their long-term prospects for improved telecommunication services.<sup>70</sup>

### **Fixed access wireless**

- 5.14 As mentioned earlier, there are two types of wireless broadband services: fixed access wireless and mobile wireless. Mobile wireless technology is rapidly evolving. Third generation mobile (3G) wireless technologies can now deliver peak data rates of 42 Mbps and 4G technologies will increase this performance to 100 Mbps. 4G technologies are currently in commercial testing phase and commercial launches are expected later in 2010.
- 5.15 Mobile wireless broadband is, however, limited by the fact that unless users are in close proximity to mobile towers, service quality can be poor and data rates experienced are well below the advertised levels, particularly for indoor use. It is for this reason that the NBN Implementation Study recommends the construction of a fixed access wireless network to service approximately 4% of the population that will be outside the fibre rollout footprint.
- 5.16 Fixed access wireless, as the name suggests, is a ‘last mile’ broadband technology that delivers broadband services via microwave wireless loop from the local point to the end user.
- 5.17 The NBN Implementation Study has recommended that the Federal Government conduct an expression of interest tender process for a commercial provider to build and operate a fixed wireless network. In the instance that no suitable proposals are received from commercial providers, the NBN Co itself, will build and operate the wireless network as a wholesale provider. The NBN Implementation Study makes recommendations about the rollout of the NBN. Until the Federal Government responds to this plan and identifies the proposals that it accepts or proposes different delivery plans to the 7% outside the fibre footprint, the timeline for fixed access wireless services is unknown. It is however, sufficiently clear that fixed access wireless services are several years away from reality for rural and regional communities.<sup>71</sup>

### **Next generation satellite**

- 5.18 Broadband satellite services are currently provided in Australia by two main satellite systems: IPSTAR and Optus. Geostationary satellites operating over Ku frequency bands provide both of these satellite services. The next generation satellites are also geostationary but operate over Ka frequency bands. This offers more than ten times

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<sup>69</sup> McKinsey and Company and KPMG, *National Broadband Network (NBN) Implementation Study*, May 2010.

<sup>70</sup> Senate Select Committee on the National Broadband Network, *Fourth Interim Report*, Senate Printing Unit, Department of the Senate, Parliament House, Canberra, May 2010, p.131.

<sup>71</sup> Senate Select Committee on the National Broadband Network, *Final Report*, Senate Printing Unit, Department of the Senate, Parliament House, Canberra, June 2010, pp.15-18.

the capacity of today's current mid-size satellites, and when in operation will represent a substantial reduction in the cost of satellite services on a per Mbps rate.

- 5.19 Access to two Ka satellites with a capacity of 55 Gbps capable of supplying broadband at peak data rates is the recommended source of broadband in the NBN Implementation Study for the final 3% of the population not serviced by fibre or fixed access wireless.<sup>72</sup> Two satellites will provide the capacity to meet the 12 Mbps peak required speed.
- 5.20 The latest update from the NBN Co is that the procurement process for two Ka satellites has begun; in January 2010 a Request for Capability Statement was announced and responses to this statement are currently being evaluated before a Request for Proposal is released in late 2010.<sup>73</sup> The satellites' launch timetable is 2014-2015.

## Summary

- 5.21 The NBN Implementation Study notes that fixed access wireless and satellite broadband have been proposed for 7% of the population because a 100% fibre rollout is not commercially viable. However, both the fixed access wireless and satellite solutions also appear to lack commercial viability and therefore would require ongoing government subsidies to operate.
- 5.22 The Committee understands that the best case scenario for both fixed access wireless and next generation satellite is that broadband will be delivered at 12 Mbps, which is substantially below the 100 Mbps forecast on the fibre network. This means that many rural and regional communities will still have lower standards of broadband than metropolitan areas.
- 5.23 As noted earlier in the report, the NBN is not expected to be completed until 2018. This has raised concerns that the telecommunications needs of regional and rural communities are being deferred until the fibre broadband network is completely or substantially rolled out. In the meantime there will be little, if any, improvement in service quality.<sup>74</sup>
- 5.24 The Committee finds that throughout the rollout of the NBN, telecommunications availability in rural and regional areas will continue to require ongoing investigation to ensure that these communities' needs are adequately represented. Additionally, it is important that efforts to improve telecommunications access in regional and rural areas are not solely reliant on the NBN and that other programs continue to be implemented.

**RECOMMENDATION 4:** The New South Wales Government continues to represent the telecommunications needs of rural and regional communities throughout the rollout of the National Broadband Network.

<sup>72</sup> McKinsey and Company and KPMG, *National Broadband Network (NBN) Implementation Study*, May 2010.

<sup>73</sup> Senate Select Committee on the National Broadband Network, *Fourth Interim Report*, Senate Printing Unit, Department of the Senate, Parliament House, Canberra, June 2010, pp.133.

<sup>74</sup> Senate Select Committee on the National Broadband Network, *Fourth Interim Report*, Senate Printing Unit, Department of the Senate, Parliament House, Canberra, June 2010, pp.132.

**RECOMMENDATION 5:** The New South Wales Government continues to invest in programs that increase telecommunications access for rural and regional communities prior to the expected completion of the National Broadband Network.

## Chapter Six - Avenues of redress for customers

- 6.1 Evidence presented in this report, the Committee's previous reports and information from a wide range of government and independent investigations, show that telecommunications access in rural and regional areas is a significant and ongoing issue. It is important that government programs and activities support telecommunications access and encourage commercial operators to increase service offerings in rural and regional communities. It is equally important that consumers are able to directly take action to improve or seek redress on their individual experiences of dissatisfaction with telecommunications services.

### Ensuring adequate services

- 6.2 The Federal Government has in place a number of consumer protection safeguards for telephone services, including the Universal Service Guarantee, Customer Service Guarantee and Priority Assistance. The right of access to affordable and reliable landline services is covered by statutory and policy requirements. However, there are still many grey areas when it comes to broadband and mobile services for consumers.
- 6.3 The Federal Government has developed a number of solutions to enable consumers to more easily access broadband and mobile services, especially for those in rural and regional communities. The Department of Broadband, Communications and the Digital Economy provides information on mobile telephone and broadband coverage areas, the Satellite Phone Subsidy Scheme and the Australian Broadband Guarantee.

### Avenues of redress

- 6.4 All consumers have rights regarding the goods and services they purchase. Consumer protections are available under the *Trade Practices Act 1994*, *Telecommunications Act 1997* and under industry codes of practice. However, despite these safeguards customers may not be satisfied with the services they are provided or the response of telecommunications companies to address their concerns.
- 6.5 A number of submissions made to the Committee have expressed concern over the lack of response that companies give to consumer concerns about service provision. People in rural and regional communities struggle to receive adequate broadband and mobile services in general and when they are not satisfied they have often found the process of redress difficult and time consuming. Below are listed some of the ways in which consumers can seek to redress issues with their service providers.

### Government agencies

#### Federal Government

#### Australian Communications and Media Authority

- 6.6 The Australian Communications and Media Authority (ACMA) is a government agency responsible for the regulation of broadcasting, the internet, radio communications and telecommunications. ACMA was established in 2005 as a merger between the Australian Broadcasting Authority and the Australian Communications Authority. ACMA derives its primary responsibility for monitoring

and reporting on carrier and carriage service provider performance from the *Australian Communications and Media Authority Act 2005* (Cwlth), and specific provisions of other relevant legislation, including the *Telecommunications Act 1997* (Cwlth).<sup>75</sup>

- 6.7 On 19 July 2010, ACMA began a formal inquiry into customer service and complaints handling in the telecommunications industry.<sup>76</sup> The *Reconnecting the Customer* inquiry will investigate current efforts made by both service providers and current regulatory bodies at federal and state level to improve customer experiences across Australia.<sup>77</sup>
- 6.8 The Federal Minister for Broadband, Communications and the Digital Economy, Senator the Hon Stephen Conroy, has indicated that if this inquiry does not adequately address the interests of consumers, then the Minister will consider exercising a newly proposed Ministerial power to direct ACMA to develop an industry standard for complaints resolution.<sup>78</sup> This industry standard would be enforced by ACMA, and have civil penalty provisions for individuals and corporations that fail to comply.<sup>79</sup>
- 6.9 The Committee notes these two activities taking place at the Federal level to standardise the telecommunications complaints process and service providers' responses. The Committee will follow the development of these activities with interest and concern for how these measures will improve the service satisfaction of regional and rural telecommunications users.

## New South Wales Government

### NSW Fair Trading

- 6.10 The NSW Fair Trading has limited powers to assist consumers with telecommunications issues. Where consumers have issues or complaints that cannot be resolved by the service provider, NSW Fair Trading directs consumers to the Telecommunications Industry Ombudsman (TIO).<sup>80</sup>

### Consumer, Tenancy and Trader Tribunal

- 6.11 The Consumer, Trader and Tenancy Tribunal (CTTT) began operating in February 2002 after a merger of the former Fair Trading Tribunal and the Residential Tribunal, with the aim of assisting consumer dispute resolution in New South Wales.

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<sup>75</sup> As listed in the *Australian Communications and Media Authority Act 2005* (Cwlth), s 8(1)(j).

<sup>76</sup> ACMA 2010, *ACMA seeks broad public and stakeholder input to telecommunications industry inquiry*, media release, Canberra, 19 July.

<sup>77</sup> ACMA, *Reconnecting the customer public inquiry: Terms of reference*, Canberra, 2010, viewed 9 August 2010, <[http://www.acma.gov.au/webwr/\\_assets/main/lib311902/reconnecting\\_the\\_customer\\_tor.pdf](http://www.acma.gov.au/webwr/_assets/main/lib311902/reconnecting_the_customer_tor.pdf)>; *Reconnecting the customer, ACMA public inquiry, Consultation Paper*, Canberra, July 2010, viewed 9 August 2010, <[http://www.acma.gov.au/webwr/\\_assets/mian/lib311902/reconnecting\\_the\\_customer\\_consultation\\_paper.pdf](http://www.acma.gov.au/webwr/_assets/mian/lib311902/reconnecting_the_customer_consultation_paper.pdf)>.

<sup>78</sup> The Hon S Conroy (Minister for Broadband, Communications and the Digital Economy) 2010, *Address to ACCAN National Conference*, Melbourne, 28 June, viewed 9 August 2010, <[http://www.dbcde.gov.au/media/speeches/2010/accan\\_national\\_conference](http://www.dbcde.gov.au/media/speeches/2010/accan_national_conference)>.

<sup>79</sup> Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009, Exposure Draft, The Parliament of the Commonwealth of Australia, Canberra, 23 June 2010, ss (2), (21); DBCDE, *Discussion of Amendments*, Canberra, 23 June 2010, viewed 9 August 2010, <[http://www.dbcde.gov.au/\\_data/assets/pdf\\_file/0009/128772/Attachment-Discussion-of-amendments-23-June-2010.pdf](http://www.dbcde.gov.au/_data/assets/pdf_file/0009/128772/Attachment-Discussion-of-amendments-23-June-2010.pdf)>.

<sup>80</sup> <[http://www.fairtrading.nsw.gov.au/Consumers/Buying\\_services/Telecommunications.html](http://www.fairtrading.nsw.gov.au/Consumers/Buying_services/Telecommunications.html)>.

- 6.12 The CTTT is an independent body that aims to resolve disputes about the supply of goods and services, and issues relating to residential property. Orders issued by Tribunal Members are legally enforceable. The CTTT's powers, functions and procedures are set out in the *Consumer, Trader and Tenancy Tribunal Act 2001* and the *Consumer, Trader and Tenancy Tribunal Regulation 2009*.
- 6.13 The CTTT's General Division handles consumer claims against businesses regarding the supply of goods or services up to the value of \$30,000. This is the primary avenue for consumers who are seeking recompense for undelivered or substandard goods and services from telecommunication service providers.

## Non-government bodies

### Australian Competition and Consumer Commission

- 6.14 The Australian Competition and Consumer Commission (ACCC) was formed in 1995 to administer and regulate the *Trade Practices Act 1974*. The ACCC is an independent statutory authority that promotes competition and fair trade in the market place to benefit consumers, business and the community.
- 6.15 The ACCC maintains a watching brief over the telecommunications industry and reports annually on the development of competition in the industry, broadband availability and take-up, and Telstra's compliance with price controls.

### Australian Communications Consumer Action Network

- 6.16 The Australian Communications Consumer Action Network (ACCAN) was established in 2008 and officially took the place of the Consumers' Telecommunications Network (CTN) on 30 June 2009 as the peak body representing the interests of Australian consumers telecommunications services.
- 6.17 ACCAN includes a range of stakeholders groups and aims to present a unified voice on behalf of consumers to Government, regulators and the industry on matters of communications availability, accessibility and affordability.<sup>81</sup>

### Communications Alliance

- 6.18 The Communications Alliance was formed to provide a unified Australian communications industry and to offer a forum for the industry to foster policy contribution and debate. The Alliance aims to encourage growth within the industry by promoting consumer protection and high industry standards. The Communications Alliance have developed the Telecommunications Consumer Protection Code with the aim of ensuring small business and residential consumer rights that had previously not been reflected in the *Telecommunications Act* and associated codes and practices.
- 6.19 The Communications Alliance offers a mediation service to help settle disputes between parties within the industry by achieving negotiated outcomes. Membership is drawn from across the communications industry including service providers and vendors, business and consumer groups and suppliers.

### The Telecommunications Industry Ombudsman

- 6.20 The TIO was established in 1993 and operates with the role and powers set out under the *Telecommunications (Consumer Protection and Service Standards) Act*

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<sup>81</sup> ACCAN, *Annual report 2009*, Canberra, October 2009, pp.5-12.

1999. The TIO functions as an independent telecommunications service dispute resolution scheme for small business and residential consumers. The TIO is an industry-funded scheme that derives its income solely from members which are charged fees for complaint resolution services. Members are only charged if the TIO receives a complaint from one of its customers. The TIO is authorised to exercise its discretion in investigating complaints made by customers and can make binding decisions up to the value of \$30,000 and recommendations up to the value of \$85,000 upon the telecommunications company.<sup>82</sup>

- 6.21 In January 2009, the TIO launched the '*connect.resolve*' campaign in response to high and increasing numbers of customer complaints to the TIO in the preceding 18 months. The aim of the program was to raise the profile of customer complaints with telecommunication companies and to encourage members to place more emphasis on customer experience in their operations. The campaign ran for six months until June 2009, resulting in a 7% drop in overall complaints in the following six months to December 2009. Specifically, customer service and complaint handling issues also declined at a similar rate but remained at around one third of overall complaints.<sup>83</sup>

#### *Telecommunications complaints process*

- 6.22 To make a complaint to the TIO it is necessary to be a residential or small business consumer that has a problem with their mobile, telephone or internet service. The consumer will need to have contacted their service provider in an attempt to resolve the situation prior to contacting the TIO. If the consumer has not contacted the service provider they will have thirty days from the lodgement of their complaint with the TIO to do so.
- 6.23 The TIO then has the authority to refer the consumer to the resolution area of the service provider for remediation. The service provider is given further ten days in which to resolve the issue. The TIO reports that 90% of complaints are resolved at this stage.
- 6.24 The first stage of the complaint process is that the TIO will assist in facilitating the consumer contacting the service provider directly for resolution. If no resolution can be made then the TIO will become more active in seeking a result for the consumer. The TIO reviews each case individually to come to a resolution that should be satisfactory for both parties. Details of the complaints process can be found on the TIO's website.

## **Summary**

- 6.25 As this chapter has presented, there are a number of government and non-government organisations that play a role in regulating the telecommunications service environment and offering avenues of redress when service is sub-standard. The main complaints-processing organisation is the TIO.
- 6.26 The Committee is pleased to see the results of the TIO's '*connect.resolve*' campaign into increasing service providers' efficiency in dealing satisfactorily with customer complaints, has seen a reduction in such complaints. The continuing work of ACMA

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<sup>82</sup> TIO, *About the Telecommunications Industry Ombudsman*, Victoria, 2010, viewed 22 June 2010, <[http://www.tio.com.au/about\\_tio.htm](http://www.tio.com.au/about_tio.htm)>.

<sup>83</sup> TIO, *connect.resolve: Complaints to the TIO about customer service and complaint handling. Update report for the period 1 July – 31 December 2009*, Victoria, March 2010, p.2.

and their recently announced '*Reconnecting the Customer*' inquiry and the actions of the Minister for Broadband, Communications and the Digital Economy to establish an industry standard for complaints resolution, are also positive steps.

- 6.27 The submissions received to this inquiry, however, also point to continuing confusion and frustration with how issues of dissatisfaction with telecommunications service are resolved for rural and regional customers. This situation may also be true for metropolitan consumers. The number of organisations and understanding which organisations are the best avenues of redress in differing circumstances is a source of confusion. In this sense educational campaigns to inform consumers of their rights and their avenues of redress in particularly situations would be helpful.

**RECOMMENDATION 6:** The New South Wales Government works with the Federal Government and associated agencies to develop and promote a centralised educational resource of telecommunication users' rights and avenues of redress.

## Appendix One – List of submissions

- 1 Ms Camyr Allyn
- 2 Upper Lachlan Shire Council
- 3 Goulburn Mulwaree Council
- 4 Ms Ronda Thomas
- 5 Tweed Economic Development Corporation
- 6 Mr Gregory Sky
- 7 Mr Noel Stansell
- 8 Darby's Falls Progress Association
- 9 Mr Andrew Woodhead
- 10 Mid Western Regional Council
- 11 Ms Dorothy Smith
- 12 Tweed Shire Council
- 13 Broken Hill City Council
- 14 Ms Deborah Durnan
- 15 Mr Richard Pillow
- 16 Koorawatha Progress Association
- 17 Ms Meredith Stanton
- 18 Murray Shire Council
- 19 Wellingrove Progress Association
- 20 Mr Richard Smith
- 21 Narromine Shire Council
- 22 Lithgow City Council
- 23 Mr Lindsay Swadling
- 24 Central New South Wales Councils (CENTROC)
- 25 Botobolar Community Committee
- 26 Mr Peter Jones and Ms Jocelyn Jones
- 27 Tumut Shire Council
- 28 Mr Robert Morgan
- 29 Ms Elizabeth Alderdice and Mr Geoff Alderdice
- 30 Mr Kieron Pearce
- 31 Ms Elizabeth Aitken
- 32 Mr Mikelis Strikis
- 33 Mr Barry Hanger

- 34 Ms Jill Overton
- 35 Mr Peter Botsman
- 36 Forbes Shire Council
- 37 Tumbarumba Shire Council
- 38 Australian Communications Consumer Action Network
- 39 Regional Development Australia – Southern Inland
- 40 Byron Shire Council
- 41 Mr Malcolm Moore

## Appendix Two – List of witnesses

### Monday, 19 April 2010 – Parliament House

<b><i>Witness</i></b>	<b><i>Organisation</i></b>
Mr Peter Adams Adjunct Researcher	Centre for Research in Complex Systems, Charles Sturt University
Mr David Anthony Communications Planning and Development	Regional Development Australia – Southern Inland
Mr Michael Cullen Executive Director, Enterprise, Small Business and Regional Development	Industry and Investment NSW
Mr Michael Talbot Assistant Director General, Court and Tribunal Services	Department of Justice and Attorney General
Mr Wayne Ruckley Executive Director, IC and T	Corrective Services NSW
Mr Colman O’Driscoll Service Director, Mental Health	Justice Health

### Friday, 23 April 2010 – Parliament House

<b><i>Witness</i></b>	<b><i>Organisation</i></b>
Mr Garry Styles General Manager	Orange City Council
Ms Jennifer Bennett Executive Officer	CENTROC
Mr Peter Hitchiner	Insight Telecommunications
Ms Kathy Meleady Director, Statewide Services Development	NSW Health
Mr Craig Smith Acting Chief Information Officer	
Dr Robert Herkes ICU Consultant, Royal Prince Alfred Hospital and Co-Chair, Intensive Care Taskforce	

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Mr John Newcombe  
Director, Education Planning and Private  
Forestry, Primary Industries Business Group

Industry and Investment NSW  
(via teleconference)

Ms Fran Schonberg  
Manager, Office of Rural Affairs

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Mr Stephen Wilson  
Chief Information Officer

NSW Department of Education and Training

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## Appendix Three – Extracts from minutes

### ***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 8)***

9.00 am, Thursday 12 November 2009

Room 1254, Parliament House

#### **Members present**

Mr Gibson, MP (Chair)

Mr Martin, MP

Mr Provest, MP

Mr Besseling, MP

#### **Apologies**

Apologies were received from Mr Constance, Mr Harris and Mr Stewart.

#### **Minutes**

Resolved, on the motion of Mr Provest, seconded by Mr Besseling:

That the minutes of the meeting on 29 October 2009 be confirmed.

#### **Correspondence**

The Committee noted correspondence from Telstra relating to Mr Besseling's concerns about broadband services in the Port Macquarie area. Mr Besseling advised that he had met Telstra's local representative who suggested that residents in the area should receive broadband by wireless services.

#### **Inquiry topic for 2010**

The Committee discussed the inquiry proposed in the discussion paper circulated and proposed in addition to investigate the availability of telecommunications services in rural and regional services.

Resolved, on the motion of Mr Besseling, seconded by Mr Martin:

That the Committee conduct an inquiry into the availability of telecommunications (including broadband) and other technology services in rural and regional communities with a particular focus on:

- a) Differences between advertised service availability and consumer experiences of service levels
- b) Gaps in service provision in particular regions and
- c) Options for improving service availability

#### **Recent Developments in Telecommunications**

The Committee noted the summary of recent developments in telecommunications policy and programs.

The Committee adjourned at 9.20 am until Monday 30 November 2009.

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***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 9)***

10.45 am, Monday 30 November 2009

Room 814/815, Parliament House

**Members present**

Mr Gibson, MP (Chair)

Mr Besseling, MP

Mr Martin, MP

Mr Constance, MP

Mr Provest, MP

**Apologies**

Apologies were received from Mr Harris and Mr Stewart.

**Minutes**

Resolved, on the motion of Mr Martin, seconded by Mr Besseling:

That the minutes of the meeting on 12 November 2009 be confirmed.

**Proposed meeting dates for 2010**

The Committee agreed to hold meetings in 2010 on the following Thursdays at 9:00 am

25 February

18 March

22 April

20 May

3 June

9 September

28 October

25 November

The Committee adjourned at 2.18 pm until Thursday 25 February 2010.

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 1)***

9.00 am, Thursday 25 February 2010

Room 1254, Parliament House

**Members present**

Mr Gibson, MP (Chair)

Mr Constance, MP

Mr Martin, MP

Mr Stewart, MP

Mr Harris, MP

Mr Provest, MP

**Apology**

An apology was received from Mr Besseling.

**Minutes**

Resolved, on the motion of Mr Martin, seconded by Mr Provest:

That the minutes of the meeting on 30 November 2009 be confirmed.

Appendix Three

**Submissions**

Resolved, on the motion of Mr Provest, seconded by Mr Martin:

That submissions for the telecommunications availability inquiry numbered 1 to 16 on the circulated list be accepted and published on the Committee's website.

**Deliberation**

Mr Martin requested that the secretariat provide information about the Community Broadband Development Fund to the certain submission writers for their information.

**Future hearing dates**

The Chair asked the secretariat to provide possible hearings dates at the next deliberative meeting for the Committee to agree upon.

**Possible visits of inspection**

The Chair asked the Committee to decide on possible visit of inspection locations for the next deliberative meeting.

**Attendance at upcoming relevant conference**

The Committee discussed attending the Cebit National Broadband Network and e-health Conference 24-26 May 2010 and agreed that interested members would advise the secretariat.

The Committee adjourned at 9.13 am until 9.00 am on Thursday 18 March 2010.

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 2)***

9.00 am, Thursday 11 March 2010

Room 1254, Parliament House

**Members present**

Mr Martin, MP (Deputy Chair)

Mr Besseling, MP

Ms Hornery, MP

Mr Harris, MP

Mr Provest, MP

**Apologies**

Apologies were received from Mr Constance and Mr Stewart.

**Acting Chair**

In the absence of a Committee Chair, the Deputy Chair took charge of the meeting.

**Change in Committee membership**

The Deputy Chair reported that on 25 February 2010 Mr Gibson was discharged from the Committee and Ms Hornery had been appointed to serve in his place. The Deputy Chair welcomed Ms Hornery to the Committee.

**Election of Chair**

There being a vacancy in the position of Chair, the Deputy Chair called for nominations for a new Chair. Ms Hornery was nominated.

Resolved, on the motion of Mr Martin, seconded by Mr Provest:  
That Ms Hornery be elected Chair of the Committee.

### **Minutes**

Resolved, on the motion of Mr Martin, seconded by Mr Provest:  
That the minutes of the meeting on 25 February 2010 be confirmed.

### **Inquiry into telecommunications availability**

Resolved on the motion of Mr Martin, seconded by Mr Harris:  
That the Committee accepts submissions 17 to 36 on the circulated list and publishes those that are not confidential on the Committee's website.

### **Correspondence**

The Committee agreed that the Chair should write to the Federal Minister for Broadband, Communications and the Digital Economy in response to his correspondence to the Committee and to ask the Minister for advice regarding potential remedies for customer dissatisfaction with advertised telecommunications services that they do not receive.

Resolved, on the motion of Mr Provest, seconded by Mr Martin:  
That the Committee Chair writes to the Federal Minister for Broadband, Communications and the Digital Economy for advice.

### **Deliberation**

Mr Martin requested that the secretariat write to the Minister for Health to request detailed information regarding telehealth programs in New South Wales.

Resolved on the motion of Mr Martin, seconded by Mr Besseling:  
That the Committee Chair write to the Minister Health seeking further information on New South Wales telehealth programs.

The Committee noted the Federal Government's announcement of mainland National Broadband Networks test sites near Kiama and Armidale.

### **Future hearing dates**

The Chair asked the secretariat to provide possible hearings dates at the next deliberative meeting for the Committee to consider.

### **Possible visits of inspection**

The Chair asked the Committee to nominate possible visit of inspection locations and dates for the next deliberative meeting.

### **Attendance at upcoming relevant conference**

The Committee discussed attending the Cebit National Broadband Network and e-health Conference 24-26 May 2010 and agreed that interested members would advise the secretariat.

The Committee adjourned at 9.26 am until 9.00 am on Thursday 18 March 2010.

Appendix Three

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 3)***

9.00 am, Thursday 18 March 2010

Room 1254, Parliament House

**Members present**

Ms Hornery, MP (Chair)

Mr Harris, MP

Mr Provest, MP

Mr Martin, MP

**Apologies**

Apologies were received from Mr Besseling, Mr Constance and Mr Stewart

**Minutes**

Resolved, on the motion of Mr Harris, seconded by Mr Martin:

That the minutes of the meeting on 11 March 2010 be confirmed.

**Inquiry into telecommunications availability**

Resolved, on the motion of Mr Harris, seconded by Mr Provest:

That the Committee accepts submissions 37 and 38 on the circulated list and publishes those that are not confidential on the Committee's website.

**Correspondence**

The Committee noted the Chair's letters to the Federal Minister for Broadband, Communications and the Digital Economy and to the Federal Minister for Health.

**Future hearing dates**

The Committee agreed to hold hearings on 19 and 23 April to hear evidence regarding telecommunications availability in rural and regional communities.

**Possible visits of inspection**

The Committee agreed that it would conduct a visit of inspection of the CSIRO's Information and Communication Technologies Centre on 19 April 2010 and to try to visit Tasmania to discuss the roll-out of the National Broadband Network on 4 and 5 May 2010.

**Attendance at upcoming relevant conference**

The Committee discussed attending the Cebit National Broadband Network and e-health Conference 24-26 May 2010 and agreed that interested members would advise the secretariat.

The Committee discussed attending the Presiding Officers' Scientific Briefing – 27 October "Impact of New and Evolving Technologies on Health Delivery" Professor Phillip Davies, Health Systems and Policy, University of Queensland.

The Committee adjourned at 9.20 am until 10.00 am on Monday 19 April 2010.

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 4)***

9.45 am, Monday 19 April 2010

Room 814/815, Parliament House

**Members present**

Ms Hornery, MP (Chair)

Mr Besseling, MP

Mr Harris, MP

Mr Provest, MP

Mr Constance, MP

Mr Martin, MP

Mr Stewart, MP

**Minutes**

Resolved, on the motion of Mr Harris, seconded by Mr Martin:

That the minutes of the meeting on 18 March 2010 be confirmed.

**Inquiry into telecommunications availability**

Resolved, on the motion of Mr Besseling, seconded by Mr Harris:

That the Committee accepts submissions 39 to 41 on the circulated list and publishes them on the Committee's website.

**Government response**

Resolved, on the motion of Mr Harris, seconded by Mr Martin:

That the Committee publishes the Government Response to the Beyond the Bush Telegraph Report on the Committee's website.

**Recent developments in telecommunications policies and programs**

The Committee noted the summary of recent developments in telecommunications policy and programs.

**Visit of inspection**

The Committee discussed the upcoming visit of inspection to the CSIRO ICT Centre on 17 May 2010 and agreed that the secretariat would confirm arrangements by email.

**Attendance at upcoming relevant conference**

The Committee discussed attending the Cebit National Broadband Network and e-health Conference 24-26 May 2010 and agreed that as no members were available, a member of the secretariat should attend if possible and advise the Committee of relevant matters.

**Public hearing**

The Chair opened the public hearing.

Charles Sturt University

Mr Peter Adams, Adjunct Researcher, Charles Sturt University was sworn and examined.

In support of his evidence Mr Adams tabled slides to assist his presentation and a document entitled "User-centred broadband: the Kenniswijk Experiment" by Trevor Barr.

Evidence completed, the witness withdrew.

Regional Development Australia Southern Inland

Mr David Anthony, Communications Planning and Development, was affirmed and examined.

Appendix Three

Evidence completed, the witness withdrew.

Industry and Investment NSW

Mr Michael Cullen, Executive Director, Enterprise, Small Business and Regional Development was sworn and examined.

Evidence completed, the witness withdrew.

At 11.00 am the Committee adjourned for a break and resumed at 11:15 am.

Department of Justice and Attorney General

Mr Michael Talbot, Assistant Director-General, Court and Tribunal Services was sworn and examined.

Mr Talbot undertook to provide further information to the Committee in relation to the location of courthouses with videoconferencing facilities and the estimated savings from the use of new technologies.

Evidence completed, the witnesses withdrew.

At 12:05 pm the Committee adjourned for lunch and resumed at 1:00 pm.

Department of Justice and Attorney General – NSW Correctives Services

Mr Wayne Ruckley, Executive Director Information Communication and Technology, was affirmed and examined.

Evidence completed, the witnesses withdrew.

Justice Health

Ms Susan Harman, Chief Information Officer was affirmed and examined. Mr Colman O'Driscoll, Service Director, Mental Health was sworn and examined.

Evidence completed, the witnesses withdrew.

**Hearing on 19 April 2010**

Resolved, on the motion of Mr Martin, seconded by Mr Besseling:

That members agree to publish the transcript once witnesses have had the opportunity to correct it.

**Article**

Mr Martin tabled an article entitled "Court Chaos" from the Wentworth Advocate of 17 April 2010 for the member's information.

The Committee adjourned at 1.55 pm until 9.00 am on Friday 23 April 2010.

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 5)***

9.35 am, Friday 23 April 2010

Room 814/815, Parliament House

**Members present**

Ms Hornery, MP (Chair)

Mr Harris, MP  
Mr Provest, MP

Mr Martin, MP

### **Apologies**

Apologies were received from Mr Besseling, Mr Constance and Mr Stewart.

### **Acting Chair**

In the absence of the Chair, the Deputy Chair opened the meeting.

### **Minutes**

Mr Martin requested the draft minutes of the meeting on 19 April 2010 be amended to refer to the Wentworth Advocate rather than the Wellington Advertiser.

Resolved, on the motion of Mr Harris, seconded by Mr Provest:

That the minutes of the meeting on 19 April 2010 as amended be confirmed.

### **Transcript of hearing of 19 April 2010**

Members agreed to review their contributions to the draft Hansard transcript of the hearing on 19 April 2010 and advise the secretariat of any changes.

### **Arrival of Chair**

Ms Hornery arrived at 9.38 am and took charge of the meeting.

### **Papers tabled at hearing of 19 April**

Members noted:

- a) Colour copies of the presentation tabled by Mr Peter Adams and
- b) Newspaper article circulated by Mr Martin

### **Public hearing**

The Chair opened the public hearing.

Mr Garry Styles, General Manager of Orange City Council was sworn and examined. Ms Jennifer Bennett, Executive Officer of Central Regional Organisation of Councils was affirmed and examined.

In support of her evidence Ms Bennett tabled a document entitled "Why early roll out of the National Broadband Network in Central New South Wales is a good investment in Australia's future."

Evidence completed, the witnesses withdrew.

At 10.15 am the Committee adjourned and resumed at 10.35 am.

Mr Peter Hitchiner, Principle of Insight Telecommunications was sworn and examined.

Evidence completed, the witness withdrew.

Ms Kathy Meleady, Director Statewide Services Development, Mr Craig Smith, Acting Chief Information Officer and Dr Robert Herkes, ICU Consultant Royal Prince Alfred Hospital and Co-Chair, Intensive Care Taskforce of NSW Health were sworn and examined.

All three witnesses agreed to provide additional information in response to questions.

Evidence completed, the witnesses withdrew.

### **Publication of Hansard**

Resolved, on the motion of Mr Provest, seconded by Mr Harris:

That members agree to publish the transcript once witnesses have had the opportunity to correct it.

### **Additional questions**

Resolved, on the motion of Mr Harris, seconded by Mr Martin:

That the witnesses from NSW Health be asked to provide:

- any information about the cost benefit analysis of telehealth services compared to traditional methods of providing rural and remote health services such as transport and time costs for specialists and patients, especially if such analysis was undertaken prior to installing the systems and
- examples of where telehealth has been used

The hearing resumed at 11.50 am.

Mr John Newcombe, Director of Education Planning & Private Forestry, Primary Industries Business Group and Ms Fran Schonberg, Manager of the Office of Rural Affairs from Industry and Investment NSW were sworn and examined via teleconference. Evidence completed, the telephone hook up was ended.

Mr Stephen Wilson, Chief Information Officer for the Department of Education and Training was affirmed and examined.

Mr Wilson undertook to provide additional information in response to questions.

Evidence completed, the witness withdrew.

The Committee adjourned at 12.58 pm until 10.15 am on Thursday 20 May 2010.

### ***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 6)***

10.16 am, Thursday 20 May 2010

Room 1254, Parliament House

### **Members present**

Ms Hornery, MP (Chair)

Mr Besseling, MP

Mr Provest, MP

Mr Martin, MP

Mr Stewart, MP

### **Apologies**

Apologies were received from Mr Constance and Mr Harris.

### **Minutes**

Resolved, on the motion of Mr Martin, seconded by Mr Provest:

That the minutes of the meeting on 23 April 2010 be confirmed.

### **Public hearing 19 April 2010**

Committee noted the prior correction to the hearing transcript for the 19 April 2010.

### **Public hearing 23 April 2010**

Committee noted the transcript from the public hearing 23 April 2010.

#### **CENTROC submission to National Broadband Network**

The Committee noted the CENTROC submission to the "National Broadband Network: Regulatory Reform for 21st Century Broadband Discussion Paper April 2009" as discussed at the public hearing 23 April 2010.

### **NBN Implementation study**

The Committee noted the recent publication of the NBN Implementation Study.

### **Revised meeting dates for 2010**

The Committee noted the revised meeting dates.

### **Follow up of correspondence to Senator Conroy**

Resolved, on the motion of Mr Besseling, seconded by Mr Martin:

That the Committee follow up a response from Senator Conroy to correspondence on 17 March 2010 regarding advertising by service providers.

### **General business**

Resolved, on the motion of Mr Besseling, seconded by Mr Stewart:

That the Committee write to the Federal Opposition Spokesperson on Broadband, Communications and the Digital Economy to seek clarification on the Opposition's position on the NBN.

The Chair reported on the 17 May 2010 visit of inspection to the CSIRO ICT Centre at Marsfield. Copies of the PowerPoint Presentation from the visit were tabled. The Committee noted that the CSIRO will be sending further information on their broadband research projects including e-health programs.

The Committee discussed potential visits of inspections to Tasmania and Norfolk Island. Committee agreed to find out more information on broadband cabling on Norfolk Island.

The Committee noted the change in secretariat arrangements.

Resolved, on the motion of Mr Besseling, seconded by Mr Martin:

That the Committee write a letter of thanks to previous Committee Manager, Ms Vicki Buchbach.

The Committee discussed indicative reporting timeframes for its two inquiries.

The Committee adjourned at 10.32 am until 10.15 am on Thursday 24 June 2010.

### ***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 7)***

10.15 am, Thursday 24 June 2010

Room 1136, Parliament House

Appendix Three

**Members present**

Ms Hornery, MP (Chair)

Mr Besseling, MP

Mr Provest, MP

Mr Martin, MP

**Apologies**

Apologies were received from Mr Constance, Mr Harris, and Mr Stewart.

**Minutes**

Resolved, on the motion of Mr Besseling, seconded by Mr Provest:

That the minutes of the meeting on 20 May 2010 be confirmed.

**CSIRO information pamphlets**

Committee noted the information pamphlets received from the CSIRO Information and Communication Technologies Centre.

**Correspondence**

The Committee noted correspondence from the Federal Minister for Broadband, Communications and the Digital Economy.

**Response to questions on notice from 19 and 23 April hearings**

Resolved, on the motion of Mr Martin, seconded by Mr Provest:

That the Committee notes the responses to questions on notice from the Department of Justice and Attorney General, the Department of Health and the Department of Education and Training publishes them on the Committee's website.

**Draft structure of report for the telecommunications availability inquiry**

The Committee noted and agreed to the draft structure to the report.

Mr Besseling discussed with the Secretariat the need for the report to provide general as well as specific findings from the submissions particularly in regards to identifying gaps in telecommunications service delivery.

**General business**

The Committee discussed potential visits of inspection including a view a court hearing conducted by video conferencing. The Committee agreed to find out whether or not they could attend a court hearing.

The Committee adjourned at 10.28 am until 10.15 am on Thursday 9 September 2010.

***Minutes of Proceedings of the Standing Committee on Broadband in Rural and Regional Communities (no. 8)***

10.16 am, 2 September 2010

Room 1254, Parliament House

**Members present**

Ms Hornery, MP (Chair)

Mr Besseling, MP

Mr Harris, MP

Mr Provest, MP

Mr Stewart, MP

### **Apologies**

Apologies were received from Mr Constance and Mr Martin.

### **Welcome to new secretariat member**

Ms Hornery welcomed the new Senior Committee Officer on the secretariat, Ms Rachael Fraher.

### **Minutes**

Resolved, on the motion of Mr Besseling, seconded by Mr Provest:  
That the minutes of the meeting on 24 June 2010 be confirmed.

### **Consideration of draft report for the telecommunications availability inquiry**

The Committee considered the Chair's draft report entitled *Are you connected? Inquiry into telecommunications availability in rural and regional communities*.

Mr Provest brought the following issues to the Committee's attention: the use of fibre rather than copper cable as a building standard in new residential areas, better access to State Government land (such as national parks) for the installation of telecommunications infrastructure, and community access to broadband in State Government facilities (such as schools) outside hours of operation. The Committee discussed that Recommendations 8, 6 and 14 of the Committee's previous report *Beyond the Bush Telegraph* have already addressed these issues. Mr Provest agreed that these recommendations did not need to be revisited in the current report.

The Chair proposed that the Committee agree to the following amendments to the Chair's draft report that were circulated at the meeting:

#### *Paragraphs 1.13 & 1.14 – page 3 (proposed by secretariat)*

Insert the following after paragraph 1.12

- 1.13 The Committee notes that this report will be tabled prior to a resolution of the hung parliament in the House of Representatives following the Federal election on 21 August 2010. The final outcome of which party or parties will form government is likely to affect the future of broadband infrastructure in Australia.
- 1.14 The Committee has decided to table its report at this time as all evidence was obtained on the assumption that the NBN would proceed in its original form. Should this not be the case, through either amendments to the NBN or the introduction of different programs, the intent of the Committee's recommendations will still be applicable in any efforts to improve the provision of broadband services in rural and regional communities.

The Committee agreed to these amendments.

Resolved, on the motion of Mr Harris, seconded by Mr Besseling:  
That the Committee adopt the report as amended and it be tabled in the House.

Appendix Three

**General business**

Mr Besseling proposed that the Committee further investigate State Government action on the Committee's Recommendation 14 in the Beyond the Bush Telegraph report to allow the community access to broadband at State Government facilities outside of operational hours. The Committee was particularly interested in whether this was being implemented in schools.

Resolved, on the motion of Mr Besseling, seconded by Mr Harris:

That the Committee follow up with the Department of Education and Training about the Committee's recommendation.

The Committee adjourned at 10.32 am until 10.15 am on Thursday 9 September 2010.