The Senate

Select Committee on the National Broadband Network

Interim report

December 2008

ISBN: 978-0-642-71991-1

This document was printed by the Senate Printing Unit, Department of the Senate, Parliament House, Canberra.

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Abbreviations

ABG	Australian Broadband Guarantee
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ADSL	Asymmetrical Digital Subscriber Line
ADSL2	Asymmetrical Digital Subscriber Line version 2
ADSL2+	Extended Bandwidth ADSL2
AMPS	Advanced Mobile Phone System
BAF	Building Australia Fund
BCA	Business Council of Australia
BSL	Broadband Service Locator
CAN	Customer Access Network
CCC	Competitive Carriers Coalition
CCF	Cross Connect Facility
CEG	Communications Expert Group
COAG	Council of Australian Governments
CSG:	Customer Service Guarantee
DBCDE	Department of Broadband, Communications and the Digital Economy
DCITA	Department of Communications, Information Technology and the Arts
DOCSIS	Data Over Cable Service Interface Specification
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
EFA	Electronic Frontiers Australia
EOI	Expression of Interest
ESA	Exchange Serving Area

FTTH	Fibre-to-the-Home
FTTN	Fibre-to-the-Node
FTTP	Fibre-to-the-Premise
HiBIS	Higher Bandwidth Incentive Scheme
HFC	Hybrid Fibre Coaxial
HSPA	High Speed Packet Access
ICAAN	Internet Corporation for assigned Names and Numbers
ICT	Information and communications technology
ISDN	Integrated Services Digital Network or Isolated Subscriber Digital Network
IP	Internet Protocol
IPA	Infrastructure Partnerships Australia
IPTV	Internet Protocol Television
IRCA	Indigenous Remote Communications Australia
ISP	Internet Service Provider
LTE	Long Term Evolution
LTIE	Long-term interests of end-users
MB	Megabyte – a million bytes; one byte is a unit of binary information comprising 8 bits.
Mbps	Megabit per second – a million bits per second
MHz	Megahertz
NBN	National Broadband Network
NGN	Next Generation Network
OAN	Open Access Network
OECD	Organisation for Economic Co-operation and Development
OPEL	Optus and Elders Communication

POP	Point of Presence
POTS	Plain Old telephone Service
P2P	Point to Point or Peer to Peer
PSTN	Public Switched Telephone Network
RFP	Request for Proposal
RIM	Remote Integrated Multiplexer
RSP	Retail Service Provider
RTIRC	Regional Telecommunications Independent Review Committee
SA	South Australia
SAU	Special Access Undertaking
SMEs	Small and medium sized enterprises
STD	Subscriber Trunk Dialling
STS	Standard Telephone Service
The department	The Department of Broadband, Communications and the Digital Economy
The Panel	The Panel of Experts
TIO	Telecommunications Industry Ombudsman
TPA	*Trade Practices Act 1974*
ULLS	Unconditioned/Unbundled Local Loop Service
USO	Universal Service Obligation
VDSL	Very High Speed Digital Subscriber Line
VoIP	Voice-over-Internet Protocol
WA	Western Australia
WA CCI	Western Australian Chamber of Commerce and Industry
WA DOIR	Western Australia Department of Industry and Resources
WiMAX	Worldwide Interoperability for Microwave Access

Glossary

Access Network

That part of a communications network which connects subscribers to their immediate service provider. It is contrasted with the core network.

Active Optical Network

A network in which the passive splitting point is replaced with an Optical Line Distribution unit which is a powered unit making it possible to have a higher bit rate on individual routes over longer distances than on a passive optical network.

Backhaul

The backhaul portion of the network comprises the intermediate links between the core, or backbone, of the network and the small sub networks at the "edge" of the entire hierarchical network. For example, while cell phones communicating with a single cell tower constitute a local sub network, the connection between the cell tower and the rest of the world begins with a backhaul link to the core of the telephone company's network (via a point of presence).

Bandwidth

The capacity for a given system to transfer data over a connection. It is measured as a bit rate expressed in bits/s or multiples of it (kb/s Mb/s etc.).

BitTorrent

A peer-to-peer (P2P) file sharing protocol designed to reduce the bandwidth required to transfer files. It does this by distributing file transfers across multiple systems, thereby lessening the average bandwidth used by each computer. For example, if a user begins downloading a movie file, the BitTorrent system will locate multiple computers with the same file and begin downloading the file from several computers at once. Since most ISPs offer much faster download speeds than upload speeds, downloading from multiple computers can significantly increase the file transfer rate.

Blackspot

Under-served Premises unable to obtain a Metro-comparable Broadband Service.

Broadband Connect Incentive Program

The Broadband Connect Incentive Program, which operated between 1 January 2006 and 13 March 2007.

Broadband Service Locator

The online application available on the Australian Broadband Guarantee webpage to enable potential customers to determine whether their premises may be able to receive a metro-comparable broadband service on a commercial basis, or be eligible for a service under the Australian Broadband Guarantee.

Brownfield

Abandoned or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contaminations.

Coaxial Cable

An electrical cable consisting of an inner conductor surrounded by an insulating spacer, surrounded by an outer cylindrical conductor. It provides protection of signals from external electromagnetic interference and effectively guides signals from external electromagnetic interference and effectively guides signals.

Core Network

The central part of a telecom network that provides various services to customers who are connected by the access network.

Customer Service Guarantee (CSG)

A performance standard created by the Australian Communications and Media Authority (ACMA). This standard provides financial compensation, of a prescribed amount, to customers who are affected by delays in service connections and fault repairs. It also covers missed appointments. However, some exemptions apply.

Dark Fibre (also unlit fibre)

Unused fibres, available for use. The term was originally used when talking about the potential network capacity of telecommunication infrastructure, but now also refers to the increasingly common practice of leasing fibre optic cables from a network service provider.

Demarcation Point

The point at which the telephone company network ends and connects with the wiring at the customer premises. A demarcation point is also referred to as the demark, DMARC, MPOE, or minimum point of entry.

Digital Loop Carrier (Remote Integrated Multiplexer - RIM)

A system which uses digital transmission to extend the range of the local loop farther than would be possible using only twisted pair copper wires. A DLC digitizes and

multiplexes the individual signals carried by the local loops onto a single data stream on the DLC segment.

Firewall

Is a dedicated appliance or software running on another computer, which inspects network traffic passing through it, and denies or permits passage based on a set of rules.

Functional Separation

Imposing an obligation of “equivalence” on a vertically integrated network provider to ensure all retail service providers, including its own downstream business, are treated equally.

Gigabyte

Is a unit of information or computer storage meaning either exactly 1 billion bytes or approximately 1.07 billion bytes. The usage of the word "gigabyte" is ambiguous: the value depends on the context. When referring to RAM sizes and file sizes, it traditionally has a binary definition, of 10243 bytes. For other uses, it means exactly 10003 bytes. In order to address this confusion, currently the International Electro-technical Commission (IEC) promotes the use of the term "gibibyte" for the binary definition. It is commonly abbreviated GB or Gbyte (not to be confused with Gb, which is used for a gigabit).

Greenfield

A term used to describe a piece of undeveloped land, either currently used for agriculture or just left to nature.

Hybrid Fibre Coaxial

A telecommunications industry term for a broadband network which combines optical fibre and coaxial cable.

IPTV

A system where a digital television service is delivered using Internet Protocol over a network infrastructure, which may include delivery by a broadband connection. A general definition of IPTV is television content that, instead of being delivered through traditional broadcast and cable formats, is received by the viewer through the technologies used for computer networks.

Kilobyte

A unit of information or computer storage equal to either 1,024 bytes (210) or 1,000 bytes (103), depending on context. It is abbreviated in a number of ways: kB, KB, K and Kbyte.

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 the Customer would be providing Last-mile Infrastructure using wireless broadband technology.

Local Loop (also referred to as a subscriber line)

The physical link or circuit, that connects from the demarcation point of the customer premises to the edge of the carrier or telecommunications service provider, network.

Megabit

A unit of information or computer storage, abbreviated Mbit (or Mb). 1 megabit = 106 = 1,000,000 bits which is equal to 125,000 bytes. In kilobytes this is either 125 kB (decimal meaning) or about 122 kB (122 KiB) (binary meaning). The megabit is most commonly used when referring to data transfer rates in network speeds, e.g. a 100 Mbit/s (megabit per second).

Megabyte

Is a unit of information or computer storage equal to either 106 (1,000,000) bytes or 220 (1,048,576) bytes, depending on context. In rare cases, it is used to mean 1000×1024 (1,024,000) bytes. It is commonly abbreviated as Mbyte or MB (compare Mb, for the megabit). The term megabyte was coined in 1970.

MiMo

In radio, it is the use of multiple antennas at both the transmitter and receiver to improve communication performance. It has attracted attention in wireless communications, since it offers significant increases in data throughput and link range without additional bandwidth or transmit power. It achieves this by higher spectral efficiency (more bits per second per hertz of bandwidth) and link reliability or diversity (resulting in reduced fading).

Multi-layered broadband infrastructure

A network comprising of wireless, optic-fibre, xDSL, and high-speed satellite service.

Next Generation Networking

A broad term to describe some key architectural evolutions in telecommunication core and access networks that will be deployed over the next 5-10 years. The general idea behind NGN is that one network transports all information and services (voice, data, and all sorts of media such as video) by encapsulating these into packets, like it is on the Internet. NGNs are commonly built around the Internet Protocol, and therefore the term "all-IP" is also sometimes used to describe the transformation towards NGN.

Open Access Network

A horizontally layered network architecture and business model that separates physical access to the network from service provisioning. The same OAN will be used by a number of different providers that share the investments and maintenance cost.

Optical Fibre

A glass or plastic fibre that carries light along its length. Widely used in communication because it transmits over longer distances and at higher data rates than other forms of communication.

Packet

In information technology, a packet is a formatted block of data carried by a packet mode computer network. Computer communications links that do not support packets, such as traditional point-to-point telecommunications links, simply transmit data as a series of bytes, characters, or bits alone. When data is formatted into packets, the bit-rate of the communication medium can better be shared among users than if the network would have been circuit switched.

Pair Gain

A method of transmitting multiple POTS signals over the twisted pairs traditionally used for a single traditional subscriber line in telephone systems. Pair gain has the effect of creating additional subscriber lines. This is typically used as an expedient way to solve subscriber line shortage problems by using existing wiring, instead of installing new wires from the central office to the customer premises. Pair gain has come into disfavour in recent years, as it is detrimental to high speed dial-up modem connections, does not support 56k and is incompatible with Digital Subscriber Line (DSL) systems.

Point of Presence

An Internet point of presence is an access point to the Internet. It is a physical location that houses servers, routers, ATM switches and digital/analogue call aggregators. It may be either part of the facilities of a telecommunications provider that the Internet service provider (ISP) rents or a location separate from the telecommunications provider.

Point to Point

Generally refers to a connection restricted to two endpoints, usually host computers. Point-to-point is sometimes referred to as P2P, or Pt2Pt, or variations of this. Among other things, P2P also refers to peer-to-peer file sharing networks. A traditional point-to-point data link is a communications medium with exactly two endpoints and no

data or packet formatting. The host computers at either end had to take full responsibility for formatting the data transmitted between them.

Remote Integrated Multiplexer (RIM)

Also known as a Digital Loop Carrier (DLC) - a system which uses digital transmission to extend the range of the local loop farther than would be possible using only twisted pair copper wires. A DLC digitizes and multiplexes the individual signals carried by the local loops onto a single data stream on the DLC segment.

Satellite Broadband Service

A Service Solution delivered by a two-way satellite service, or other service determined by the Department to be satellite based.

Shaping

The practice of slowing data speed once the monthly data usage limit, as specified in a Service Plan, is reached.

Structural Separation

The creation of separate companies with ownership controls, which prevent retail service providers, including the incumbent's downstream businesses, from having effective control in the NBN infrastructure.

Terabyte

Commonly abbreviated TB is a measurement term for data storage capacity. The value of a terabyte based upon a decimal radix (base 10) is defined as one trillion (short scale) bytes, or 1000 gigabytes.

Terrestrial Broadband Service

Is a Service Solution delivered by ground based networks, including ADSL, cable type services, wireless services, or any other service determined by the Department to be terrestrially based.

Twisted Pair

A form of wiring in which two conductors (two halves of a single circuit) are wound together for the purposes of cancelling out electromagnetic interference (EMI) from external sources; for instance, electromagnetic radiation from unshielded twisted pair (UTP) cables, and crosstalk between neighbouring pairs.

Unbundled Local Loop

Is the regulatory process of allowing multiple telecommunications operators use of connections from the telephone exchange's central office to the customer's premises.

Universal Service Obligation

The obligation placed on universal service providers to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business. No carriage services have been prescribed to date. Telstra is currently the sole universal service provider, but additional universal service providers may be declared in the future. As the universal service provider, Telstra is obliged to have a policy statement and marketing plan approved by ACMA. The policy statement and marketing plan outline how Telstra intends to fulfil its obligations as universal service provider, including fulfilling its obligations to people with a disability, people with special needs and eligible priority customers.

Video on Demand

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

Voice Over Internet Protocol

A protocol optimized for the transmission of voice through the Internet or other packet-switched networks.

WiMax

WiMAX — Worldwide Interoperability for Microwave Access - a wireless technology that provides high-speed broadband connections over long distances. It is not a mobile platform; it is specifically designed for optimum broadband performance. It is internationally recognised as a technology that delivers the highest quality wireless broadband.

List of Committee Comments and Conclusions

Chapter 2

2.14 The committee acknowledges that broadband benefits will facilitate the government's social inclusion agenda, particularly for those Australians living in isolation. However, the committee also acknowledges that the extent to which these benefits are felt will be highly dependent on the extent to which the NBN will be accessible by those in regional and remote Australia.

Conclusion 1

2.26 The committee is of the opinion that, in order to prevent a difference of measurement modelling, similar to that which occurred with the assessment of the OPEL bid, possibly resulting in a consequential delay to the NBN implementation, it would be beneficial for all stakeholders to know which modelling the department will use to assess the coverage footprint.

2.38 It is the committee's view that it would be an extremely unsatisfactory result for the NBN, such a significant government investment, which has been contributed to by all Australian taxpayers, to reach only a small percentage of a state's geographical area while leaving a very high proportion of rural and remote citizens without access to the NBN.

Conclusion 2

2.42 At the time of this report going to print, neither the department nor the Australian Government had provided any guidance or further clarification of the composition of the 98 per cent NBN coverage footprint. The committee believes that the government needs to provide this clarification to proponents and stakeholders alike to ensure a level of confidence that the significant $4.7 billion funding will benefit in particular those Australians that are already underserved or unserved. Particular attention is required to address the needs of those remote areas that are currently generating a large percentage of Australia's wealth yet are in the most underserviced areas.

Conclusion 3

2.73 The committee believes that submissions received and evidence taken to date strongly support the need for the term 'open access arrangements' to be more clearly defined. The committee calls on the government to provide a clarification of this term, which is critical to encouraging ongoing competition in the industry. This would ensure that there is no potential for a successful bidder to interpret the term to its own competitive advantage.

2.109 The committee acknowledges concerns of affordability and service provision, which have the potential to impact on the long-term sustainability of the NBN operator in providing a viable return of investment.

Conclusion 4

2.127 The committee questions the appropriateness of the timeline for the evaluation of the RFP, believing it will not permit the necessary level of scrutiny by either the Expert Panel or the ACCC to select the successful proponent for the NBN.

Chapter 3

3.48 The committee considers that the government should have provided a regulatory framework within the RFP; this would have provided proponents with greater certainty in building their business case for the NBN, while also providing a legal framework for the assessment of proposals.

Conclusion 5

3.56 The committee concludes that omitting to specify the structure of the new network has caused confusion and uncertainty among potential bidders and industry stakeholders.

3.88 The committee supports the general consensus that any new regulations that underpin the NBN should ensure that any operator/owner of the new network cannot participate in anti-competitive behaviour.

3.112 The committee encourages the government to effectively utilises this historic opportunity for regulatory change.

Conclusion 6

3.124 The committee believes that it is in the interest of the government, the industry and the Australian people to ensure that delays to the timeframe for implementation of the NBN are kept to a minimum. Notwithstanding this, the committee considers that the government should incorporate appropriate and timely opportunities for consultation with the industry on suggested regulatory changes.

Conclusion 7

3.125 The committee also believes that the government could easily remove several avenues of possible legal challenge by incorporating industry consultation into the process, even at this late stage.

Chapter 4

Conclusion 8

4.55 The committee believes that the requirement in the RFP for the NBN design to be based on a FTTN or FTTP platform should be broadened to enable a greater level of technology convergence where this is more appropriate than fibre.

Conclusion 9

4.76 The committee acknowledges the complexity of the deployment of the NBN. However, the committee concludes that the most effective use of this substantial expenditure would be to ensure that those Australian homes and businesses that are currently most disadvantaged should be prioritised for initial deployment of the NBN. That is, areas that are currently underserved or unserved should have broadband deployed first, with infrastructure subsequently rolled-***IN*** towards the cities from those underserved areas, which are generally in regional, rural and remote communities.

Conclusion 10

4.77 The committee concludes that the best model for planning the deployment schedule would incorporate high levels of coordination and ongoing involvement by local and state governments with the Commonwealth Government. This would also provide assurance of support through appropriate regulatory changes within each tier of government.

Conclusion 11

4.78 The committee also concludes that there needs to be a carefully considered transition plan to migrate both existing service providers and their customers to the new network over the five year period specified in the RFP. The aim of this transition would be to ensure that it occurs seamlessly, with a no disadvantage test over the five years and that it minimises the issue of stranded assets and stranded customers.

Chapter 1

Introduction

Referral of the inquiry

1.1 On 25 June 2008, the Senate established the Select Committee on the National Broadband Network (the committee) to inquire into and report by 30 March 2009 on:

(a) the Government's proposal to partner with the private sector to upgrade parts of the existing network to fibre to provide minimum broadband speeds of 12 megabits per second to 98 per cent of Australians on an open access basis; and

(b) the implications of the proposed National Broadband Network (NBN) for consumers in terms of:

(i) service availability, choice and costs;

(ii) competition in telecommunications and broadband services, and

(iii) likely consequences for national productivity, investment, economic growth, cost of living and social capital

(c) and other related matters.

Conduct of the inquiry to date

1.2 The committee advertised the inquiry in *The Australian* and invited written submission by 15 August 2008; details of the inquiry were placed on the committee's website.

1.3 The full terms of reference for this inquiry are quite extensive and can be found at appendix 1. The Senate placed specific requirements on the conduct of the inquiry, including that the committee should 'request formal submissions that respond directly to the terms of reference' from a number of key stakeholder organisations and Commonwealth departments.

1.4 Letters were written to the named departments and organisations; however all responded by declining the invitation to submit.

1.5 As the committee had not received any submissions by the initial closure date, a number of additional letters were written to relevant organisations inviting submissions. The committee agreed to extend the submission closing date until 12 September 2008.

1.6 As a consequence of the additional letters, the committee has now received 32 written submissions from individuals, organisations and government departments; a list of submissions can be found at appendix 3.

1.7 The committee also decided to pose a number of 'Questions on Notice' to those departments and organisations who had previously declined to submit. Questions were varied to ensure they were pertinent to each organisation and that the response was within their field of expertise without impinging on perceived issues of probity in relation to the Request for Proposals (RFP) process.

Public hearings

1.8 An initial private briefing was held to provide committee members with detailed explanations of contextual background leading up to the Request for Proposals, outlining the various technologies and defining terminology involved.

1.9 To date a number of public hearings have been held in Sydney, Canberra, Melbourne, Perth and Brisbane. Details of these hearings, including the list of witnesses who gave evidence, are shown at appendix 4.

Reporting

1.10 The closing date for the Request for Proposals to build the National Broadband Network was 26 November 2008. The Department of Broadband, Communications and the Digital Economy (the department) has stated that it will allow six weeks from that date for the proposals to be assessed by the Panel of Experts (see page 6), followed by two weeks for the Panel to assess the report on proposals prepared by the Australian Competition and Consumer Commission (ACCC).

1.11 Although the reporting date for this inquiry is not until 30 March 2009, the committee is keen to ensure the inquiry findings made to date are made available to the Senate, the department, and the public in general prior to the announcement of a successful proponent.

1.12 Consequently the committee is providing this Interim Report, which includes evidence from all submissions and incorporates evidence from its first seven public hearings. The committee's final report will investigate all terms of reference and make final recommendations for tabling in the Senate on 30 March 2009.

Background to the inquiry

1.13 On 11 April 2008, the Minister for Broadband, Communications and the Digital Economy, Senator the Hon. Stephen Conroy, announced the release of a Request for Proposals to roll out and operate a new, open access, high-speed, fibre-based broadband network. The announcement detailed the provision of up to $4.7 billion for the network build, and consideration of any regulatory changes necessary to facilitate the development, over five years, of a National Broadband Network (NBN).

1.14 The NBN is to be a critical element of the Australian Government’s national infrastructure agenda, providing the primary platform for delivering high-speed

broadband services, but also possibly the platform for basic voice services and future innovative services in the coming decades.

1.15 Just prior to the announcement of the RFP, the minister cancelled the OPEL[1] contract that had been conditionally signed under the previous Coalition Government to deploy a broadband solution for rural and regional Australia.

1.16 This inquiry was subsequently established to investigate the new proposal by the Labor Government, with notable reference to inquiring into whether the new proposal would deliver an improved outcome to that provided for under the OPEL contract, which was targeted for completion by mid-2009. This inquiry was called also in acknowledgement that, even if the NBN was to provide an improved solution, deployment may well not be completed until 2013, or even later.

The Coalition Government's OPEL solution

1.17 In June 2006, the then Department of Communications, Information Technology and the Arts (DCITA) put out an Expression of Interest (EOI) seeking industry views on a proposal for an innovative approach to achieving the Coalition Government's broadband objectives.

1.18 This was in recognition that, despite some success achieved through an incentive-based scheme that enabled extension to broadband service coverage, some areas of underservicing still remained, and that perhaps the approach under the Coalition Government's Broadband Connect Infrastructure Program was not the most efficient and effective way to enable metro-comparable broadband in these areas.

1.19 The EOI stated that the primary objective of any future competitive grants program would be to achieve sustainable, equitable access to broadband in regional areas by supporting the extension of metro-comparable broadband services into currently underserviced areas, without the need for ongoing government subsidies.

1.20 This objective is strikingly similar to that which is proposed under the Labor Government's current Request for Proposals. However, the major area of difference is in the manner funding is to be provided. The Coalition Government's approach was to provide a subsidy that would have been specifically targeted to underserved areas. The very different approach taken by the Labor Government is to provide Commonwealth funding of up to $4.7 billion, preferrably on an equity basis, but with no guarantee that the current areas of disadvantage would be any better off at the end of the five year project.

1.21 By June 2007, the previous Coalition Government had undertaken a program called *Australia Connected*, a comprehensive broadband solution with five major components:

1 Optus and Elders Communication.

(a) a new national high speed wholesale network, delivering a mix of fibre optic, ADSL2+ and wireless broadband platforms to rural and regional areas;

(b) a new commercial fibre optic network, facilitating a fibre network build in cities and larger regional centres;

(c) the Australian Broadband Guarantee, a safety net entitling Australians living in the most remote or difficult locations to a broadband subsidy of $2750 per household;

(d) *BroadbandNow*, a one-stop help centre for consumers to determine the technology options that would best suit their needs; and

(e) preservation of the $2 billion Communications Fund to ensure those funds are protected in perpetuity by legislation for the benefit of regional and remote Australians and provide an income stream for future upgrades.[2]

1.22 The previous government conducted a competitive bidding process, and committed to making any legislative changes required to enable the broadband network to be built without the need for additional government funding. Two companies submitted commercial proposals, with OPEL Networks Pty Ltd announced in June 2007 as the successful bidder.

1.23 The OPEL network was a joint venture partnership between Elders and Optus, offering a range of services including end-to-end broadband services for resellers, improved backhaul access across its network with reduced pricing, assistance to regional Internet Service Providers (ISPs) to link into their network, and a regional presence through 400 Elders' shopfronts across Australia.

1.24 OPEL was to deliver access to ADSL2+[3] broadband for 1.5 million premises in regional areas by enabling an additional 312 exchanges. Once rolled out, premises without access to OPEL's network would be eligible to receive a subsidised service provided under the Australian Broadband Guarantee (ABG).

1.25 In May 2007 FANOC, (a company created by the G9[4]) lodged with the ACCC a Special Access Undertaking (SAU) to provide third party access to a bitstream access service on a proposed ADSL2+ fibre-to-the-node (FTTN) in the five mainland capital cities.

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2 Sourced from: http://www.broadbandnow.gov.au/government-intiatives.htm on 29 July 2008.

3 Extended Bandwidth Asymmetrical Digital Subscriber Line Version 2.

4 G9: the Group of 9 was a conglomerate formed by Optus, AAPT, iiNet, Internode, Macquarie Telecom, PowerTel, Primus, Soul & TransAct.

1.26 In a draft decision handed down in December 2007, the ACCC rejected the SAU, noting that FANOC could withdraw and refine their proposal for future consideration, and inviting industry comment on their decision.

1.27 Telstra appears to have been the only industry respondent noted on the department's website. Interestingly, Telstra supported the ACCC's decision. However, Telstra was simultaneously very critical of the assessment guidelines on which the ACCC's decision was based, outlining the planning, deployment and regulation of the Next Generation broadband network for Australia.

1.28 Perhaps not surprisingly, Telstra was particularly critical of the ACCC's preference for the network to be built by a non-vertically integrated investor that had no role whatsoever in downstream markets.

1.29 On 2 April 2008, the Minister for Broadband, Communications and the Digital Economy announced that the OPEL Networks broadband contract had been cancelled. A precondition of the contract was that OPEL undertake testing and mapping to substantiate the service coverage set out in its proposal. In particular, OPEL was required to confirm its proposal would provide coverage reasonably equivalent to 90 per cent of underserviced premises identified by the department. OPEL's testing had been verified by Australian Communications and Media Authority and Enex TestLab. However, when the department conducted its own assessment, they concluded that the required 90 per cent benchmark would not be achieved by the OPEL proposal, a claim that was strongly refuted by the OPEL consortium.

1.30 In a media release on 2 April 2008, the minister said that:

> DBCDE performed an analysis of the detailed testing and mapping undertaken by OPEL, and determined that OPEL network would only cover 72 per cent of identified under-serviced premises. … On the basis of that assessment the Government determined that OPEL's Implementation Plan did not satisfy the condition precedent of the funding arrangement, and as a result the contract has been terminated.[5]

Request for Proposals

1.31 The termination of the OPEL contract was closely followed by the minister's announcement on 11 April 2008 of the Request for Proposals for the National Broadband Network. The announcement specified that the NBN would need to:

- deliver minimum download speeds of 12 megabits per second to 98 per cent of Australian homes and businesses;

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5 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'OPEL Networks Funding Agreement not to proceed', Media Release 82658, 2 April 2008, http://www.minister.dbcde.gov.au/media/media_releases/2008/019 (accessed 25 November 2008).

- ensure the network is rolled out and made operational progressively over five years using fibre-to-the-node (FTTN) or fibre-to-the-premises (FTTP) technology;
- support high quality data, voice and video services;
- earn the Commonwealth a return on its investment;
- facilitate competition in the telecommunications sector through open access arrangements that allow all service providers access to the network on equivalent terms; and
- enable uniform and affordable retail prices to consumers, no matter where they live.[6]

1.32 The Commonwealth's objectives for the NBN project also include that it will be consistent with Australia's international obligations and that it facilitates opportunities for Australian and New Zealand small and medium enterprises (SMEs) to provide goods and services to the project.

1.33 In addition, all proposals must be compatible with the government's $100 million *Fibre Connections to Schools* initiative. The closing date for proposals was initially 25 July 2008, but was extended to midday on 26 November 2008.

Assessment process

1.34 Proposals will be assessed through a process which the government has stated is to be competitive, transparent and accountable. A Panel of Experts (the Panel) will assess the proposals and provide their recommendation to the government so that the successful proponent can be announced and the new network build can commence. The Panel members are:

- Ms Patricia Scott (Chair): Secretary, Department of Broadband, Communications and the Digital Economy (DBCDE);
- Dr Ken Henry AC: Secretary Department of Treasury;
- John Wylie: CEO, Lazard Carnegie Wylie;
- Laureate Professor Rod Tucker: University of Melbourne;
- Professor Emeritus of Communications, Reg Coutts: University of Adelaide;
- Mr Tony Shaw: former Australian Communications Authority Chairman; and
- Tony Mitchell: Allphones Chairman.

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6 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, 'Government invites National Broadband Network proposals', Media Release 82947, 11 April 2008, http://www.minister.dbcde.gov.au/media/media_releases/2008/023 (accessed 25 November 2008.

Role of the Australian Competition and Consumer Commission

1.35 The RFP document outlines the role of the Australian Competition and Consumer Commission (ACCC); the ACCC is to provide the Panel with ongoing advice on issues including:

> …wholesale access services and prices, access arrangements, proposed legislative or regulatory changes and the likely impact of Proposals on pricing, competition and the long-term interests of end-users in the communications sector.[7]

1.36 The Panel will provide the ACCC with the Proposals 'as soon as is practicable'[8] to facilitate formulating their advice and the written report. The ACCC's report is to be lodged with the Panel two weeks before the Panel is due to complete its assessment of proposals – i.e. within the eight weeks following the closure date for proposals.

1.37 The Panel will also consider advice provided by a range of Commonwealth agencies and specialist advisers.

Evaluation criteria

1.38 Detail of the evaluation process is provided in the RFP document, with six listed evaluation criteria. The Panel will evaluate each proposal against these criteria, and then make a comparative assessment of all proposals as to which proposal(s) offer the best overall value for money to the Commonwealth.

1.39 The evaluation criteria against which proposals will be assessed are:

(a) the extent to which the Proposal meets the Commonwealth's objectives for the NBN project;

(b) the capacity for the Proponent to roll-out, maintain, upgrade and operate the network;

(c) the nature, scope and impact of any legislative and/or regulatory changes that are necessary to facilitate the Proposal;

(d) the cost to the Commonwealth of the Proposal;

(e) the acceptability to the Commonwealth of the contract terms and conditions proposed by the Proponent and the extent to which the Proposal departs from the Commonwealth's notified commercial terms (if any); and

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7 Department of Broadband, Communications and the Digital Economy (DBCDE), *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*; 11 April 2008, paragraph 10.4.2, p. 36.

8 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*; 11 April 2008, paragraph 10.4.4, p. 36.

(f) the extent of the Proponent's compliance with the RFP.[9]

1.40 The government has stated that, following the RFP closing date on 26 November 2008, the Panel will have eight weeks in which to assess the proposals and provide a recommendation to the minister.

Separate but parallel submission processes

1.41 As a separate process, but running in parallel with the RFP, the government invited industry and public interest groups to provide submissions on the regulatory issues, including consumer safeguards, relevant to the outcome of the NBN process. Submissions to this process closed on 25 June 2008. Proponents will have access to these submissions, so that they can be taken into consideration when drafting their RFP.

1.42 Proponents, industry, public interest groups and other stakeholders have also been invited by the government, again in a separate process running in parallel with the RFP, to make submissions on policy and funding initiatives to provide affordable access to broadband services to remote areas that may be outside the NBN coverage. This could include strategies to enhance the ABG program, guidelines for which were released on 1 July 2008. The government has also committed $270.7 million for the ABG for the next four financial years. Submissions to provide broadband services to the areas outside the NBN coverage closed on 30 June 2008, and have also been provided on the department's website for access by intending proponents.

Structure of this report

1.43 The terms of reference for this inquiry are very broad and as such this Interim Report will not attempt to cover the terms in their entirety. However, a number of common themes are emerging in the written submissions and have been supported in the evidence provided at the public hearings held to date. Concerns raised revolve around the following issues:

- The lack of clarity and/or definitions within the Request for Proposals document of terms that carry critical importance for potential proponents;
- The time frame allocated by the government for the evaluation and assessment of proposals, including possible changes to the current regulatory regime that would be a necessary component of their proposal;
- The basis for allocation of the government's funding, including possible impacts from the current global financial crisis on external funding provision;
- The high likelihood that the National Broadband Network will be a monopoly, and the consequential impact that may have on competition and innovation within the industry;

9 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*; 11 April 2008, paragraph 10.3.1, pp 35-36.

- The basis for pricing access to the network;
- The consequential preference for some form of separation between the owner/operator of the network and any downstream retail business units;
- The opportunity to implement major regulatory reforms for the industry, including a strengthening of the powers of enforcement for the Australian Competition and Consumers Commission; and
- The nature of the roll-out including principles for a transition plan for current services and carriers.

1.44 Chapter 2 provides some contextual background to the RFP, commenting on the framework and on the overall conduct of the RFP process. It will also probe the RFP terminology and how differing interpretations have been the source of confusion and uncertainty for proponents, the industry and the general public alike. Chapter 3 explores the issues surrounding the current regulatory regime, discussing the implications for the NBN should it be a monopolised entity, and regulatory reforms that will promote innovation and competition within the telecommunications industry. Chapter 4 will examine suggestions for the nature of the rollout of the NBN and what should be essential components of any transition or migration schedule.

1.45 In this Interim Report, all references to Hansard transcripts relate to the Proof Hansard.

1.46 Consideration of the full terms of reference will be undertaken within the final report, due to be tabled in the Senate on 30 March 2009.

Chapter 2

Framework for the Request for Proposals

Introduction

2.1 Throughout this inquiry, the committee has heard concerns expressed by stakeholders and prospective bidders alike relating to potential differences in the interpretation of a number of key concepts and terms of phrase within the National Broadband Network (NBN) Request for Proposals (RFP) document. There have also been issues raised about the perceived transparency of the process due to the lack of face-to-face discussion opportunities with the sector and the tight timeframes specified for the assessment of proposals after the closing date.

2.2 This chapter explores the varying definitions of broadband technology, examines a number of key terms and concepts within the Request for Proposals and also provides comment on the overall tender process.

What is broadband?

2.3 Broadband is rapidly becoming a critical element of Australia's national infrastructure, being an enabling technology that fulfils a key role in connecting consumers and businesses to the online economy. It allows organisations and government departments alike to adopt more flexible service delivery and more productive ways of operating.

2.4 The term broadband is a contraction of the term 'broadband width', generally used to describe fast, 'always-on' internet access. The intrinsic value of broadband is not just the technology, but in what it enables people and businesses to do. Most people are not concerned about what type of technology might deliver their broadband access, but rather their ability to access services and perform tasks where, when and how they want. Different users will have different needs; the diversity of consumer demand underscores the fact that there is unlikely to be a 'one-size-fits-all' broadband solution for Australia.

High speed broadband

2.5 A definition of 'high speed' broadband provided in the government's RFP is 'a minimum dedicated downlink speed of 12 Mbps (Megabits per second)'[1] that is capable of supporting 'symmetric applications such as high-definition video-

1 Department of Broadband, Communications and the Digital Economy (DBCDE), *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.5.2, p. 7.

conferencing.'[2] However the government also recognises that this speed will most likely be quickly outdated, requesting that proponents should outline how their solution would support future upgrades 'in line with international trends'[3], while demonstrating a 'clear upgrade path … to at least 2020 and preferably beyond.'[4]

2.6 In relation to what is 'high speed', the committee received evidence at the public hearing in Sydney that many Australian households and businesses are already able to access broadband speeds much higher than 12 Mbps. Mr Gregory Hicks, Chairman of Adam Internet Pty Ltd, made the following remarks in his opening statement:

> We have our own networks in South Australia that currently are providing more than 50 per cent of our customers with speeds greater than what the national broadband network is proposing anyway.[5]

2.7 Mr Hicks later reinforced this point by saying, 'In fact, I do not class the 12 megs as the next step.'[6]

2.8 The Organisation for Economic Cooperation and Development (OECD) Broadband Statistics report published in June 2008 clearly shows that available broadband speeds in Australia in October 2007 were well below other OECD countries, including New Zealand; they also illustrate that our incumbent telecommunications operator does not provide the fastest connection rate within Australia.[7] Although Australia rated in the top ten OECD countries when rating the fastest advertised connection speeds, the top five countries were at least three times faster, with the highest rating country, Japan, rating thirty times faster than Australia's fastest connection speed.

2.9 At the Canberra public hearing, Mr Lyon from Infrastructure Partnerships Australia, noted that:

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2 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.5.3, p. 7.

3 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.5.9, p. 8.

4 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.1.11, p. 2.

5 *Committee Hansard*, Sydney, 7 October 2008, p. 39.

6 *Committee Hansard*, Sydney, 7 October 2008, p. 48.

7 *OECD Broadband Statistics*: *Fastest broadband speeds advertised by the incumbent telecommunications operator, all technologies*, October 2007, http://www.oecd.org/dataoecd/10/55/39575114.xls (accessed 2 November 2008); *OECD Broadband Statistics*: *Fastest advertised connection available among all surveyed operators, by country*, October 2007, http://www.oecd.org/dataoecd/11/36/39575235.xls (accessed 2 November 2008).

> The speeds in both Japan and South Korea are around 100 megabits per second. We are talking about a minimum speed in Australia of around 12 [Mbps], so we still have some way to go if we are to reach them.[8]

2.10 Conversely, the committee has heard that many Australian homes and businesses will not require speeds much higher than 12 Mbps to access online services, contending that the majority of benefit gained from speeds higher than that is purely social in nature, being utilised by consumers wanting to download movies or participate in interactive online games. Mr Paul Budde commented that:

> There are still a million people in Australia for whom the only thing they do is to occasionally check emails.[9]

2.11 In his submission, Professor Joshua Gans made a similar observation, noting that:

> Indeed, evidence from Japan and South Korea where even fast internet connections are available suggests that where there is demand it is mainly for video downloads and gaming.[10]

2.12 However, the committee received evidence that businesses will definitely benefit, as was noted by Dr Walter Green from the Communications Expert Group (CEG), whose submission included a summary of case studies looking at the impact of broadband on small and medium enterprises (SMEs) in the United Kingdom.

2.13 This summary highlighted the productivity gains that could be achieved by SMEs, the lack of which could lead to 'loss of opportunity and reduced efficiencies.'[11] It is well acknowledged that for any business, 'time is money'; this was reflected in a comment made in Dr Green's submission that, in general:

> …SMEs were dependent on multi megabit … [and] the main driver for bandwidth was response times … They all reported improved profits and efficiencies because they could spend more time delivering the services they were good at …[12]

2.14 The committee acknowledges that broadband benefits will facilitate the government's social inclusion agenda, particularly for those Australians living in isolation. However, the committee also acknowledges that the extent to which these benefits are felt will be highly dependent on the extent to which the NBN will be accessible by those in regional and remote Australia.

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8 Mr Brendan Lyon, Executive Director, Infrastructure Partnerships Australia, *Committee Hansard*, Canberra, 8 October 2008, p. 25.

9 Mr Paul Budde, Managing Director, Paul Budde Communication, *Committee Hansard*, Sydney, 7 October 2008, p. 83.

10 Professor Joshua Gans, *Submission 15*, p. 4.

11 Communications Expert Group, *Submission 31*, p. 6.

12 *Submission 31*, p. 7.

Specified coverage of the NBN

2.15 The RFP follows the government's election commitment by requiring that 98 per cent of Australian homes and businesses will be covered by the successful NBN fibre-based solution, with the remaining two per cent to have 'an improved broadband service'[13] through funding under the Australian Broadband Guarantee (ABG) program.

2.16 The Australian Government has injected $270.7 million to continue the ABG over the next four years. Answering questions at Senate Estimates in relation to how this funding will be utilised, the Secretary of the Department of Broadband, Communications and the Digital Economy, Ms Patricia Scott, said:

> The Australian Broadband Guarantee will provide access to metro comparable broadband services to underserved areas while the network is being rolled out and for the remaining two per cent of Australians in rural and regional areas.[14]

2.17 Ms Scott explained that the demand for the broadband guarantee is expected to decline as a consequence of 'the continuing provision of commercial metro-comparable services'[15] via the NBN rollout.

Qualifying the 98 per cent coverage

2.18 The committee repeatedly drew attention to the objective stated within the RFP that 98 per cent of Australian homes and businesses would be covered by the NBN, attempting to clarify on what basis this percentage was decided upon, and how the Department of Broadband, Communications and the Digital Economy (the department) would assess whether prospective proponents would achieve that level of coverage. At the Senate Estimates hearing on 20 October 2008, the Minister for Broadband, Communications and the Digital Economy, Senator the Hon. Stephen Conroy explained that:

> After extensive consultation with the sector, we believed that 98 per cent was achievable and so we decided to set that as our benchmark … it is our stated policy and election commitment to reach 98 per cent.[16]

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13 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 35.

14 *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 9.

15 *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 9.

16 *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, pp 31-32.

2.19 The minister also suggested that the specified coverage rate was very achievable when he continued that:

> … I have not heard one single potential bidder suggest that they cannot reach 98 per cent …[17]

2.20 It was further explained that the RFP was specifically not prescriptive in what geographic areas the 98 per cent of covered homes and businesses existed. This was to ensure that the RFP:

> … maintains as much flexibility as it can for the Commonwealth. … We have left it up to the bidders as part of the competitive process to suggest what the best architecture is.[18]

2.21 As an alternative view, Mr Paul Budde suggested to the committee that the requirement for fibre to reach 98 per cent of Australian homes and businesses was unnecessary. At the public hearing in Sydney, Mr Budde stated his view that:

> I am totally in favour of looking at fibre to the node to approximately 91 to 93 per cent of the population. It is silly to go for 97 [sic] per cent. For that last two, three or four per cent [coverage], you are spending all your $4 billion, and it does not make sense. It is not necessary.[19]

2.22 Most other witnesses and submissions did not agree with Mr Budde on this point. For example, in his submission Dr Green from CEG stated that, in order to achieve the government's broadband objectives, it was essential for all Australians to have access to broadband services. Dr Green then recommended that the 98 per cent needs to be further clarified or defined by the government:

> The Commonwealth Objective of achieving 98% coverage is critical to the future wellbeing of all Australians, however the definition needs to be clarified or strengthened by including a definition such [that] "all communities of more than 100 persons should have access to the NBN Broadband network."[20]

2.23 Discussion at the Canberra public hearing turned to how the government would measure whether each proponent would actually reach 98 per cent coverage, in particular what modelling the department would be using to make their assessment. The department explained that proponents have been asked to provide a wide range of detailed information within their proposal, much of which relates to coverage:

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17 *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 33.

18 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 33.

19 Mr Budde, Paul Budde Communication, *Committee Hansard,* Sydney, 7 October 2008, p. 84.

20 Communications Expert Group, *Submission 31*, p. 3.

> …proponents are asked not only to indicate what extent their coverage will be but also the methodology by which they have come to that number themselves.[21]

2.24 When the department was subsequently questioned whether the modelling that the department was using to evaluate the ability to achieve the required 98 per cent coverage would be provided to bidders, the department responded by saying that:

> … there are a number of approaches to modelling and in the interests of a very comprehensive and thorough assessment of proposals we envisage using all those … there is no single set that we could give to proponents.[22]

2.25 This response does not provide the level of confidence that proponents are seeking and seems to imply that there may be several models used, or the department is as yet undecided as to the model they might use. This raises doubts in relation to the transparency of the process, given that proponents do not have access to this critical piece of information that would assist their solution design. This is borne out by the fact that the previous OPEL contract was cancelled subsequent to the department applying its own modelling to measure the coverage promised by OPEL, which provided different results to OPEL's assessment.

2.26 The committee is of the opinion that, in order to prevent a difference of measurement modelling, similar to that which occurred with the assessment of the OPEL bid, possibly resulting in a consequential delay to the NBN implementation, it would be beneficial for all stakeholders to know which modelling the department will use to assess the coverage footprint. The committee heard from Terria, (one of the bidders) at the Canberra public hearing, that they had sought clarification of how the 98 per cent would be calculated by the department. Dr Wagg from Terria told the committee that:

> …we have written at least twice to the department specifying what we believe 98 per cent to be, what the basis is of what we are going to submit and the logic behind why we believe that will achieve 98 per cent. … As far as I am aware, we have yet to receive any response from the department formally identifying that our position is incorrect.[23]

2.27 Dr Wagg's consortium colleague, Mr Michael Simmons, later stipulated that bidders needed to be confident on what the modelling would be and also that the department would apply that model consistently across all proposals:

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21 Mr Philip Mason, Assistant Secretary, Regulatory and Technical Branch, National Broadband Network, DBCDE, *Estimates Hansard*, Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 36.

22 Mr Mason, DBCDE, *Estimates Hansard*, Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 36.

23 Dr Michael Wagg, General Manager, Networks Strategy, Terria, *Committee Hansard*, Canberra, 8 October 2008, p. 42.

> … I must also stress that there is no dispute … on coverage measurement. It is just seeking clarity and agreement between both parties on how it would be measured and that that methodology would apply to all bidders.[24]

The remaining two per cent

2.28 A substantial number of stakeholders and members of the general public have expressed their concern to the committee that the two per cent of Australian homes and businesses that will not be covered by the NBN would be those in remote and rural Australia, or other 'black spot' areas, which are already underserviced or unserviced.[25]

2.29 This concern was predictably expressed quite clearly in submissions from state governments responsible for a large number of remote communities, which have the potential of being bypassed by the NBN due to their location and low population densities.

2.30 The submission provided by the Queensland Government incorporated their previous submissions provided to the department in response to a call for suggestions on recommendations for regulatory change and on how to supply broadband services to the two per cent. In the latter submission, it was highlighted that defining the NBN broadband footprint for their state was a key issue for Queensland. Of particular concern was that to date no detail has been provided by the Australian Government:

> … on how [the 2 per cent] will be determined or where the 2 per cent will be located.[26]

2.31 The Queensland Government submission illustrated its concerns with a map created using population densities of Census Districts obtained from the 2004 Census. This clearly highlighted that, by using populations densities, the 98 per cent footprint would include all highly populated areas along the coast of Queensland, with the vast majority of inland regional, rural and remote Queensland comprising the remaining two per cent. The Queensland Government submission strongly states that:

> The Queensland Government does not wish the NBN 98 per cent threshold to be allocated in Queensland purely on a population density basis.[27]

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24 Mr Michael Simmons, Managing Director, Terria, *Committee Hansard*, Canberra, 8 October 2008, p. 43.

25 See for example: Queensland Government, *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 4.

26 *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 4.

27 *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 6.

2.32 A subsequent map illustrated a comparative 98 per cent footprint that would be created if the Australian Government was to ensure that the NBN provided services to:

- Population centres in Western Queensland (not just those within a few hundred kilometres of the coast);
- All bounded localities and hub towns;[28]
- Every school and tertiary campus in Queensland;
- Every health and public safety facility (i.e. police, ambulance, SES and fire service); and
- All state and local government libraries.[29]

2.33 This footprint covered a far greater geographical area of Queensland, with the submission consequently calling on the Australian Government to:

> …collaborate with the states to agree on the location of homes and businesses that will benefit from the NBN.[30]

2.34 The Queensland Government has demonstrated that it will continue to strive to meet the broadband needs of its citizens, stating that it will:

> …consider using its telecommunications expenditure to support the extension of the NBN bidder proposals should they not meet all the Queensland Government's requirements [described above in 2.32].[31]

2.35 The South Australian Government expressed similar concerns in their submission to the Regional Telecommunications Independent Review Committee (RTIRC) in June 2008. The submission states that almost three-quarters of South Australia's population reside in metropolitan Adelaide. However, South Australia (SA) differs from other states in that it has only two regional centres with more than 20,000 people. The submission highlights this, stating that:

> The sparseness of the population is indicated by the fact that only 30 towns have a population greater than 2,000 and 50 per cent of the state's regional population reside in towns of less than 200 people or in rural areas. Over

28 A hub township is a small rural township offering both residences and businesses of the township and outlying areas access to core services. Their function is convenience, social amenity and service level.

29 Queensland Government, *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 6.

30 *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 4.

31 *Submission 5*, 'Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas', p. 8.

> 30 per cent of the regional population is in towns with less than 200 people or in rural areas outside of towns.[32]

2.36 In the attachment to their RTIRC submission, the existing level of broadband access in regional, rural and remote South Australia is described, noting that:

> … a significant proportion (estimated at 27 per cent) of South Australia's regional, rural and remote population remains unserved.[33] [emphasis added]

In some regional areas the proportion of population that cannot access broadband at all is as high as 33 per cent.[34]

2.37 Like the Queensland submission, the situation is clearly illustrated with a map indicating the 98 per cent NBN footprint that would be covered if it was based on population densities. This footprint would represent only four per cent of the state's land mass. The state acknowledges however that the actual NBN coverage may in fact be significantly less that 98 per cent, 'due to the economics and practicalities of an FTTN architecture solution'.[35] If the footprint was dropped even by a small percentage, to 95 per cent of the population, coverage would reach only 0.7 per cent of the state's land mass.

2.38 It is the committee's view that it would be an extremely unsatisfactory result for the NBN, such a significant government investment, which has been contributed to by all Australian taxpayers, to reach only a small percentage of a state's geographical area while leaving a very high proportion of rural and remote citizens without access to the NBN.

2.39 South Australia recommends against allowing the NBN operator to adopt a 'cherry-picking' market-driven approach to select the larger towns 'with the most easily deployed broadband solutions.' It closes with the following statement:

> … the submission urges the adoption of region-wide projects as the most effective means to reduce the effect of being outside the NBN coverage and recognises a collaborative model as the best approach to achieve widespread, sustainable outcomes.[36]

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32 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, p. 3.

33 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008,. 2.

34 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, Attachment 1, p. 2.

35 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, p. 7.

36 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, p. 18.

2.40 The Western Australia Department of Industry and Resources (WA DOIR) also noted concerns with where that state would fit into the 98 per cent footprint. When asked whether they have been able to determine with any certainty where the 98 per cent may be, WA DOIR answered in the negative.

> We tried to ask that question of people in Canberra and no-one could give an exact answer. … WA as a whole could become the two per cent. … I think we risk becoming the two per cent casualty of NBN.[37]

2.41 Mr Anson Cheng from WA DOIR drew attention to the fact that the majority of Western Australia's (WA) population of approximately 1.8 million lives in Perth, with around 400,000 living in rural and remote areas. Of this number, around 200,000 to 300,000 live in the state's far north-west region. Mr Cheng highlighted the importance of this small section of Australia's population, noting that:

> … the bulk of the wealth of this nation is generated by these 200,000 to 300,000 people in the north-west, and they are not getting the infrastructure.[38]

Conclusion

2.42 At the time of this report going to print, neither the department nor the Australian Government had provided any guidance or further clarification of the composition of the 98 per cent NBN coverage footprint. The committee believes that the government needs to provide this clarification to proponents and stakeholders alike to ensure a level of confidence that the significant $4.7 billion funding will benefit in particular those Australians that are already underserved or unserved. Particular attention is required to address the needs of those remote areas that are currently generating a large percentage of Australia's wealth yet are in the most underserviced areas.

2.43 Chapter 4 will highlight this issue again to examine suggestions for the rollout schedule for the NBN.

Definition of open access

2.44 One of the critical Commonwealth objectives within the RFP is that the National Broadband Network:

> …facilitates competition [in the telecommunications sector] through open access arrangements that ensure equivalence of price and non-price terms and conditions, and provide scope for access seekers to differentiate their product offerings.[39]

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37 Mr Anson Cheng, Manager, Broadband Infrastructure, Western Australia Department of Industry and Resources (WA DOIR), *Committee Hansard*, Perth, 6 November 2008, p. 14.

38 Mr Cheng, WA DOIR, *Committee Hansard*, Perth, 6 November 2008, p. 12.

39 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*; 11 April 2008, paragraph 1.3.1.10, p. 5.

2.45 Given that this objective is central to ensuring that the current level of anti-competitive behaviour is addressed, there has been strong criticism that the government did not clearly define the term 'open access' within the RFP. 'Open access arrangements' is a term used within the RFP, which does leave room for interpretation. However, the government has repeatedly stated that it has deliberately avoided being prescriptive to allow proponents the greatest degree of flexibility.

> The approach taken in the request for proposals is an approach that tries not to be prescriptive. It is outcomes focused with 98 per cent coverage and open access competition … and it wants to have the most competitive process possible to achieve those outcomes.[40]

2.46 In the RFP the government expands on open access by stating that:

> …the long-term interests of end-users should continue to be promoted. The Government is therefore determined to ensure that appropriate open access arrangements are in place to promote competition and ensure efficient investment. In this context it will be important to ensure that access is provided on equivalent price and non-price terms and conditions. … Proponents should keep in mind the Government's objective of providing scope for access seekers to differentiate their product offerings.[41]

2.47 Although the government's intensions may have been to encourage innovation by proponents, the capacity for individual interpretation of the open access terminology has led to uncertainty within the industry.

2.48 Many submissions have consequently sought to provide the government with what they believe should be considered as 'open access' to the network, with some calling for this to be defined within legislation. The submission provided by Google was a prime example, stating that:

> Google submits that the Government should consider regulatory conditions that will preserve the fundamental open architecture of the Internet in designing the regulations to apply to the NBN. …
>
> …the Government should also consider crafting narrowly tailored non-discrimination rules that appropriately limit potential access provider misconduct, as competition may not be a panacea.[42]

2.49 Comments relating to open access are often interwoven with requests for regulatory change that would engender sustainable competition in the telecommunications market; however, this relationship will be more fully explored in chapter 3.

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40 Mr Colin Lyons, Deputy Secretary, National Broadband Network Taskforce, DBCDE, *Committee Hansard*, Canberra, 8 October 2008, p. 54.

41 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraphs 1.5.14-15, p. 9.

42 Google, *Submission 29*, p. 17.

Why is open access so critical?

2.50 The requirement for open access stems from the commonly held assumption that, due to Australia's high infrastructure costs, large land masses and relative low population densities (compared with other developed countries such as the United Kingdom), it is most likely that the NBN will be characterised as a natural monopoly. Clearly there are issues with the current incumbent having a strong monopoly position in most local markets, but particularly in non-commercially viable remote and regional areas, which has subsequently lead to lack of choice and higher costs in those areas. There is a need to avoid re-creating similar issues when designing the NBN.

2.51 In order to achieve open access, it can be deduced that the new owner/operator of the NBN, which will most likely be a monopoly provider, must share with other access seekers, without discrimination, the infrastructure they build, in order to enable competition. The Western Australian Government states that:

> … it is in the national interest to encourage (if not compel) the local monopoly bottleneck facilities' owner to share its facilities with its competitors.[43]

2.52 iiNet attributes the existing lack of customer access to fixed line broadband to not only the lack of infrastructure, but also to a 'lack of genuine open access to existing infrastructure'.[44]

2.53 In their submission, iiNet offers their own definition of open access requirements as being:

> …the broad requirements for improvements in the relationships between the rights and obligations of the network owner/operator (Access provider) and those organisations purchasing access (Access Seekers) … to services and facilities for the creation and eventual sale of retail products and services to end users.[45]

2.54 Of particular importance is their qualification that open access requirements:

> …do not relate to the sale of retail products and services to end users.[46] [emphasis added]

This strong comment captures the concern that the capacity for individual interpretation may allow a prospective proponent to claim they enable open access, when what they actually will allow is open access to their own pre-packaged services.

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43 Western Australia Department of Industry and Resources, *Submission 2*, p. 1.

44 iiNet, *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 3.

45 *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 7.

46 *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 7.

2.55 Google draws attention to the exponential growth of the internet in the last decade, highlighting that this has been due to the open access on which the internet was founded:

> This open, non-discriminatory architecture [of the Internet] has given rise to fierce competition, constant innovation and unparalleled social benefits … [and] was deliberately designed to empower end-users...[47]

Telstra's differing definition

2.56 It is a fact that although urban areas can support competition in the provision of backhaul, once the metropolitan or major regional areas are exited, Telstra is the frequently the monopoly provider of backhaul between major centres. Due to the immense distances and subsequent extremely high infrastructure costs involved, it is unlikely that facilities-based competition would ever be sustainable in rural and remote areas of Australia.

2.57 In their submission Vodafone notes that once the NBN is operational, the use of Telstra's backhaul will significantly increase. However, for the reasons mentioned, there is unlikely to be a competing infrastructure provider:

> Accordingly, the vast majority of transmission routes display strong natural monopoly characteristics, meaning entry [as a competitor] is neither desirable from a social welfare perspective nor commercially viable…[48]

2.58 Vodafone draws the conclusion that because of the strong likelihood that there will be a monopoly owner/operator of backhaul in rural and remote areas, open access requirements for the NBN become even more critical:

> The importance of open and non-discriminatory access to backhaul transmission is therefore likely to significantly increase with the roll out of the NBN … The regulatory regime for the NBN must recognise the importance of backhaul infrastructure, and maintain the status of such transmission as a declared service under the existing regime.[49]

2.59 Vodafone believes that it will be essential that large-scale wholesale customers like themselves:

> …are able to purchase unbundled wholesale access services which allow them to develop a suite of tailored products for their customers.[50]

2.60 This comment concurs with that made earlier by iiNet that open access must allow access seekers to differentiate their products. The current RFP only asks that prospective bidders 'should keep in mind' this objective; however the committee

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47 Google, *Submission 29*, p. 14.

48 Vodafone, *Submission* 9, p. 16.

49 *Submission* 9, p. 17.

50 *Submission* 9, p. 17.

suggests that there is a strong requirement for the government to ensure that proponents achieve this objective.

2.61 A number of submissions have stated that they believe that the only feasible service provider that could fulfil the government objectives for the delivery of the NBN is Telstra. Electronic Frontiers Australia is of this opinion, noting that, for a number of reasons:

> …as a matter of commercial and legal practicality, nobody other than Telstra would be able to build the FTTN network.[51]

2.62 Telstra has publicly stated that it supports open access, but the cause for concern within the industry is the fact that the current incumbent has a very different understanding of the term open access.

2.63 In their submission, Optus went to great lengths to draw similarities between the current 'open access' practices of Telstra and what Telstra has proposed in their response to the suggestions for regulatory changes required for the NBN. The submission quotes a number of pre-conditions that Telstra has stated that it would require to roll-out the NBN, which include:

> (a) A specific guarantee that services on the NBN will be excluded from the current regulations;
>
> (b) That it would only be obligated to provide access to a limited set of "anchor products". These are the legacy services it provides today – it would have no obligation to provide new services;
>
> (c) That it should have freedom to set wholesale prices based on "value" not "cost"; and
>
> (d) There would be no restrictions on Telstra discriminating between the prices and delivery of both wholesale and retail services.[52]

2.64 Optus states that although Telstra is claiming that this equates to open access, in reality this is far from the case:

> [Telstra's] regulatory model is actually a form of discretionary access not open access – that is Telstra will provide access on its discretion and on its terms.[53]

2.65 The Optus submission supports their claim with a quote from the General Manager of Telstra's wholesale division, which indicates that Telstra does not intend to treat its retail and wholesale customers on equal terms:

> Whether we would sell exactly the same products in the wholesale division as the sorts of things that retail would be seeking for their end customers,

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51 Electronic Frontiers Australia, *Submission 23*, p. 2.

52 Optus, *Submission 19*, pp 13-14.

53 *Submission 19*, p. 14.

> not necessarily. Just like it is now, we sell a lot of things in wholesale that retail don't directly buy an equivalent of and I expect that would continue to be the case.[54]

2.66 In the submission from the Competitive Carriers Coalition, Telstra's definition of open access was strongly criticised. The submission quoted a media statement by Telstra that seems to confirm the concerns of many that Telstra indeed has a completely different concept of open access. Mr Donald McGauchie from Telstra is quoted from a media briefing held on 23 June 2008, where Mr McGauchie stated his belief that Australia should move:

> …away from "open access" type requirements, in which competitors can free ride or cheap ride on incumbent's networks…to one based on competition between fully vertically and horizontally integrated rivals…[55]

2.67 Mr Maha Krishnapillai from Optus criticised the stance taken by Telstra that they would define the meaning of open access, warning that Telstra's definition would not facilitate a level playing field for competitors. Telstra responded to the criticism by stating that:

> It's a purely open access proposal … you will be able to take the [wholesale] service from the network that we build and do with it whatever you like. And copy what we do if you are prepared to invest...[56]

2.68 Digital Tasmania provided a submission to the committee that called for access regulation that would protect and encourage competition, so that:

> …access seekers are free to seek commercial arrangements with both NBN and other non-NBN operators … [so that] a level playing field can be created for all access seekers [which] offers ISPs the ability to differentiate themselves … through competitive commercial arrangements.[57]

Open access as defined in the RFP

2.69 Returning then to the definition provided within the Request for Proposals, a key objective for the NBN is to establish a national broadband network that:

> …facilitates competition through open access arrangements *that ensure equivalence of price and non-price terms and conditions, and provide scope*

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54 Optus, *Submission 19*, p. 14, quoting Kate McKenzie interview with Alan Kohler, 17 July 2008.

55 Competitive Carriers Coalition, *Submission 8(c)*, 'A Critique of Telstra's Regulatory Model for Broadband Networks Since 2005', p. 14.

56 Luke Coleman, 'Optus charge: Telstra NBN "open access" akin to North Korea, Zimbabwe!', *Communications Day*, Issue 3351, 29 August 2008, p. 1, quoting Dr Tony Warren, Telstra.

57 Digital Tasmania, *Submission 18*, p. 7.

> *for access seekers to differentiate their product offerings*;[58] [italicisation added]

2.70 Despite Telstra's assurance that it will meet that objective, it is clear that the majority of stakeholders' lack confidence in this undertaking, most likely due to Telstra's prior record of anti-competitive behaviour. Indeed, in their evidence at the Canberra public hearing, Mr David Quilty from Telstra provided their definition of open access, which seems to confirm the concerns of many.

> What we mean by an open access network is that Telstra … would make available to wholesale customers a range of wholesale *products* on an equivalent basis. … I cannot go into detail of what those *products* might be.[59] [italicisation added]

2.71 As previously mentioned, stakeholders have highlighted that open access must be supported by appropriate changes to regulation, with many also advocating structural changes to the industry itself to prevent anti-competitive behaviour by a powerful monopoly provider. Although the definition of open access may appear to be reasonably clear within the RFP, a cause for concern is the fact that the advocated restructure of the industry is not assured as a component of the NBN, especially when Telstra has openly stated that it will not be a part of the NBN process if structural separation is a prerequisite:

> Telstra's position is that if further separation is part of the NBN then we are not in a position either to build or to bid for the NBN. We have sought clarity from the government that further separation will not be required of Telstra as part of the NBN … and that clarity is very important in terms of Telstra being able to do this project.[60]

2.72 The relationship between open access, structural separation and regulatory changes will be more fully examined in chapter 3.

Conclusion

2.73 The committee believes that submissions received and evidence taken to date strongly support the need for the term 'open access arrangements' to be more clearly defined. The committee calls on the government to provide a clarification of this term, which is critical to encouraging ongoing competition in the industry. This would ensure that there is no potential for a successful bidder to interpret the term to its own competitive advantage.

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58 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.3.1.10, p. 5.

59 Mr David Quilty, Group Managing Director, Public Policy, Telstra, *Committee Hansard,* Canberra, 11 November 2008, p. 18.

60 Mr Quilty, Telstra, *Committee Hansard,* Canberra, 11 November 2008, p. 5.

Funding estimates and allocation

2.74 In the government's announcement of the National Broadband Network, it committed up to $4.7 billion to facilitate the roll-out. One of the terms of reference for this inquiry requests the committee to investigate:

> (k) the cost estimates on which the Government has based its policy settings for a NBN, how those cost estimates were derived and whether they are robust and comprehensive.[61]

2.75 Through the course of this inquiry, there have been comments relating to the adequacy of this funding, how it relates to predicted costs of implementing the NBN, and whether the funding should have been targeted to ensure benefits to those Australians that are already underserviced or unserviced by broadband.

2.76 The Department of Broadband, Communications and the Digital Economy was questioned extensively by the committee on the funding, in acknowledgement of the significant proportion of the budget that the $4.7 billion represented. The requirement for clarity from the department was heightened following the global financial crisis that evoked a strong monetary response from the government, which included the spending, if necessary, of the entire surplus to ensure Australia survived the crisis.

2.77 At the Canberra public hearing, the department was asked whether it had made any calculation or estimation of the overall cost of rolling out a National Broadband Network, with Senator Nash commenting that:

> We seem to be at bit of loss of even a close to ball park figure of what the total figure might end up being?[62]

2.78 Responding to this, Mr Colin Lyons, from the department answered:

> I would not wish to speculate on the cost. The government has indicated it will offer up to $4.7 billion … [and] expects proponents to make a significant contribution … it is a matter for the competitive process to bring forward the best possible proposals … within the cap of the contribution that the Commonwealth has said it will provide.[63]

2.79 The Coalition Government had established a $2 billion Communications Fund that was to ensure that funding is available 'in perpetuity' to enable the telecommunications industry to provide metro-comparable services in regional and remote Australia. Questions were asked of several departments by the committee as to the fate of the $2 billion and whether it had been rolled into the $4.7 billion made available for the NBN. Several departments provided similar responses to this

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61 Committee terms of reference, available at: http://www.aph.gov.au/Senate/committee/broadband_ctte/tor.htm (accessed 4 November 2008).

62 Mr Lyons, DBCDE, *Committee Hansard*, Canberra, 8 October 2008, p. 50.

63 Mr Lyons, DBCDE, *Committee Hansard*, Canberra, 8 October 2008, p. 50.

question. The response from the Department of the Treasury perhaps captures the essence of these answers:

> In the 2008-09 Budget, the Australian Government announced that it will close the Communications Fund and transfer the balance to the Building Australia Fund (BAF), with up to $4.7 billion from the BAF to be made available for the NBN initiative. This reflects the Government's election commitment to use the $2 billion from the Communications Fund to finance, in part, its contribution to the roll-out of the NBN.[64]

2.80 This answer confirmed Senator Nash's concerns that where there had previously been $2 billion set aside purely for the provision of metro-comparable services for those in regional and remote areas,[65] this funding would now be used to provide broadband for the majority of Australians who already had access to broadband services.

2.81 In their response to this same question, the department also explained the purpose of the newly created BAF:

> The BAF will provide a financing source for future investment in critical economic infrastructure in transport and communications such as broadband.[66]

2.82 At the Senate Estimates hearing on 20 October 2008, members from the Select Committee also questioned the minister as to whether the recently announced criteria for prioritising the projects that could access funds from BAF would be applied retrospectively when allocating the NBN funding. In response, the minister stated quite categorically that:

> This [expenditure for the NBN] will not be subject to Building Australia Fund processes. This is a separate election commitment.[67]

2.83 The minister eventually provided details of where the $4.7 billion would be sourced, as follows:

> …a provision for the national broadband network is to be included in the contingency reserve, pending the determination of the successful proponent. … Budget Paper No. 1 identifies where the funds will be sourced. I refer you to page 7-6 … which states that government will close the Communications Fund and transfer its assets to the BAF, the Building

64 Department of the Treasury, answer to question on notice, Question Two (b), 10 September 2008 (received 24 September 2008).

65 See *Committee Hansard*, Canberra, 8 October 2008, p. 53.

66 DBCDE, answer to question on notice, Question Thirteen (a), 10 September 2008 (received 25 September 2008).

67 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard*, Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 28.

> Australia Fund. The BAF will also receive $2.7 billion from the Telstra 3 sale process.[68]

2.84 Since this inquiry was established in June 2008, the global financial situation has worsened considerably to the point where it is commonly termed the 'global financial crisis'. The Australian Government has put in place a number of financial measures designed to steel the nation's economy from the full impact of this crisis. Despite this, the value of the Australian dollar has fallen by a third since the May Budget was brought down. This will have the obvious consequence of making it more difficult for prospective proponents to source financial backing for their NBN costs, while also increasing their costs to build.

2.85 This fact was conceded even by Telstra, which, having now placed a bid, will undoubtedly be positioned as one of the strongest contenders financially. At the public hearing in Canberra, Telstra stated that:

> …obviously times have changed … [T]he cost of capital has increased. Of late we have seen a significant devaluation or reduction in the value of the Australian dollar, and virtually all of the equipment for this would be sourced from overseas. The economics of building this are not getting easier.[69]

2.86 At the Senate Estimates hearings in October 2008, discussion ensued around the recent government announcement of its intention to spend half of this financial year's surplus to minimise any impact from the current global financial crisis. It was proposed by Senator Minchin that, due to the surplus being halved, the $4.7 billion committed by the government for the NBN would now represent close to half the BAF, with potentially less funding being available for other essential services such as education and health.[70]

2.87 Despite repeated questioning, the minister would not speculate on the size of the BAF, noting that:

> Because a whole range of factors could impact on the final size of the BAF … I am just not in a position to give you any commentary on it. … That will depend on the final size of the surplus. It will depend on a whole range of factors to do with growth, tax receipts and [other financial] issues.[71]

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68 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 46.

69 Mr Quilty, Telstra, *Committee Hansard,* Canberra, 11 November 2008, p. 24.

70 See discussion, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 47.

71 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 47.

2.88 At both the Senate Estimates hearing and also the Select Committee's Canberra public hearing, questions were asked of the department as to how the figure of $4.7 billion was determined to be an appropriate figure for government funding of the NBN. The minister was able to explain that this was based on a range of discussions that his department had held with the industry:

> There have been a range of estimates and I have drawn on … such expert policy analysis as the Page research centre. … We took some soundings, and no-one in the sector at the time believed that the proposition that we were putting forward was unreasonable.[72]

2.89 Mr Lyons from the department also reiterated that the $4.7 billion is the maximum commitment from the government, and that the RFP document made it clear to proponents that they would be required to make a significant contribution to the cost of implementation.[73]

2.90 The manner in which the $4.7 billion will be allocated was also a concern for the industry and stakeholders alike. Throughout the inquiry the committee heard calls for the $4.7 billion to be targeted to areas that are currently underserviced, rather than fund a fibre upgrade to urban and other areas that are already able to access broadband. This issue will be examined in detail in chapter 4 of this report.

2.91 The WA Department of Industry and Resources touched on targeted approaches to funding when describing an initiative they have placed before the government for future funding:

> …instead of putting a blanket broadband coverage throughout the state, or this whole country, we should apply a targeted approach where it is required, not duplicating the infrastructure. It is just a waste of money.[74]

2.92 The committee attempted to determine whether the $4.7 billion would be targeted to specific areas or groups of homes and businesses. At the Canberra public hearing, Mr Lyons from the department explained that:

> It is not targeted to any specific areas. … [The government] has asked proponents to indicate in their proposals what would be the uneconomic areas that would be part of its coverage rollout … to determine the extent to which there is any subsidy component in their bid.[75]

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72 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 47.

73 Mr Lyons, DBCDE, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 48.

74 Mr Cheng, *Committee Hansard,* Perth, 6 November 2008, p. 7.

75 Mr Lyons, DBCDE, *Committee Hansard,* Canberra, 8 October 2008, pp 50-51.

2.93 The minister verified this during Senate Estimates, commenting that this would ensure that the successful solution would not create a second class of broadband receivers in rural and remote areas:

> We have explicitly stated that we support the cross-subsidy [from the successful proponent to the underserved areas]. So there will be one uniform price reaching 98 per cent of Australians – not a two-tier system … It is a national build …[76]

2.94 When further questioned as to whether the government could assure those in regional and remote Australia that this cross-subsidy would be ongoing, beyond the five year scheduled roll-out, the department could only verify that this was, once again, just one of the factors that proponents would have to provide, which would be considered together with the stated objectives and evaluation criteria.[77] To confirm otherwise would be speculating on the outcome of the RFP.

2.95 Also questioned was the requirement within the RFP that the proponents demonstrate the capacity to provide the government with a return on investment. The RFP document states that:

> The Government has indicated it will make a funding contribution of up to $4.7 billion to establish the NBN. This contribution may take the form of debt or equity which would be required to earn a return. While the Government has previously indicated its preference for an equity investment, other forms of funding will also be considered.[78]

2.96 Telstra again pointed to the economics of fulfilling the government's objectives in the current financial climate:

> …commercially we could not, even with regulatory certainty, roll out a fibre-to-the-node network to 98 per cent. The economics would not stack up … without government money, it is simply not feasible to roll out to that footprint, but that is not what the government is asking in the RFP.[79]

2.97 In their evidence at the public hearing, the government's preference for an equity-based investment was also raised with Telstra, who verified that if this was required by the government, Telstra would not participate in the NBN.[80]

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76 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 49.

77 See discussion, *Committee Hansard,* Canberra, 8 October 2008, pp 49-52.

78 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.1.12, p. 2.

79 Mr Quilty, Telstra, *Committee Hansard,* Canberra, 11 November 2008, p. 27.

80 See discussion, *Committee Hansard,* Canberra, 11 November 2008, p. 27.

Other financial considerations within the RFP

2.98 During Senate Estimates in October 2008 and also during the committee's public hearings, there was much discussion on whether a cost-benefit analysis had been, or would be, undertaken by the government on the investment of $4.7 billion of taxpayers money, and whether that study would be made available to the public. When asked by the committee whether he was conducting a cost-benefit analysis, the minister answered:

> This is an election commitment and we will deliver on our election commitment. … No ifs, no buts: it will be delivered.[81]

2.99 The committee considered that this was an 'amazing' admission by the government adding the comment that:

> I am just fascinated that you propose to do it without any cost-benefit analysis of how you will spend $4.7 billion of tax payers' money.[82]

2.100 The same question was raised quite independently by Professor Joshua Gans in his submission during his discussion of how Telstra had 'dramatically revised' its own estimates of the value of broadband to the economy. Professor Gans states that:

> …as an economist, I am concerned as to whether a proper cost-benefit study as been conducted (either within government or industry). Those benefits … have not been appropriately quantified in a rigorous manner.[83]

2.101 If there has not been a government cost-benefit analysis, this runs contradictory to the government's policy in relation to the $20 billion Building Australia Fund, under which all initiatives and projects seeking funding under undergo the scrutiny of what the government has stated will be a rigorous cost-benefit analysis.

2.102 Another concern raised regarding how the fund might be spent was in relation to whether there would be any allocation towards researching the types of online services that would drive take-up levels of the NBN once it was implemented.

2.103 This issue can be likened to the 'chicken and the egg' debate, as it could be said that, without the infrastructure being present, services cannot be provided, so infrastructure needs to be established prior to services being developed and delivered. Conversely, it could be said that appropriate services must be made available as soon as the NBN is available; otherwise there will be no incentive for people to adopt the new broadband, which would make it less commercially viable for an owner/operator, who might in turn limit their future investment. This issue was highlighted in two

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81 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 28.

82 Senator the Hon. Nick Minchin, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 28.

83 Professor Joshua Gans, *Submission 15*, p. 2.

separate submissions; both advocated for research into the provision of services, but from a slightly different perspective.

2.104 Professor Joshua Gans acknowledges the importance of providing the infrastructure for high speed broadband, but continues that infrastructure itself does not create demand for such connections. Professor Gans suggests that the government should be investing 'on two fronts':

> First, it needs to encourage applications that leverage the network … e health, e-education or video-conferencing. … Second, the government needs to investigate the price of computing equipment that households need to access the new network.[84]

2.105 Professor Gans highlights that for many households the purchase of appropriate computer equipment would be a constraint on their ability to utilise the network, with the consequence that they would be paying for a network through their taxes but unable to gain any benefit from it.[85]

2.106 In Professor Trevor Barr's submission, he strongly recommended that the government should utilise a proportion of the $4.7 billion to research the types of services that consumers would utilise once they had access to the NBN:

> The present ongoing National Broadband Network (NBN) tender process gives almost no attention to the complexities of services on the demand side of the broadband equation. … It is surely incongruous for a government to offer such huge capital expenditure to ensure that the new fibre network passes 98% of Australian homes but to ignore the issues of what services will be offered to whom and how?[86]

2.107 The affordability issue was also taken up by Ms Teresa Corbin from the Consumers Telecommunication Network. Ms Corbin stated the need to ensure that broadband is affordable for all Australians, and suggested that this could be achieved by the government also using the $4.7 billion to assist people of lower income levels:

> It is in our submission that there has to be some kind of communications allowance, particularly for people who are recipients of a government benefit and require higher downloads. For instance, if they are a user of any health service … they are going to require some assistance to ensure that they are not running up ridiculous bills, and we end up with a two-tiered health system. We will have to be very cognisant of how, in reality, its affordability plays out on customers.[87]

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84 Professor Joshua Gans, *Submission 15*, p. 4.

85 *Submission 15*, p. 4.

86 Professor Trevor Barr, *Submission 13*, pp 2-3.

87 Ms Teresa Corbin, Chief Executive Officer, Consumer Telecommunications Network, *Committee Hansard*, Sydney, 7 October 2008, p. 71.

2.108 Evidence taken at the Perth public hearing also raised the issue of affordability when discussing the ability of remote Indigenous communities to access broadband services. Commenting on the impact that the Australian Broadband Guarantee has had in remote communities, Mr Anson Cheng stated that:

> There is a bit of impact, but … [t]hese are people who are very poor and cannot even afford to pay for their basic living. How can they afford broadband in this case?[88]

2.109 The committee acknowledges concerns of affordability and service provision, which have the potential to impact on the long-term sustainability of the NBN operator in providing a viable return of investment.

The RFP process itself

2.110 On 11 April 2008 the government released the Request for Proposals document outlining the objectives of the government's broadband initiative and a number of criteria against which each bid will be evaluated.

2.111 In addition to the issues already raised regarding the lack of clarity provided in relation to critical terminology used in the RFP, the committee has had a number of other concerns highlighted in evidence and written submissions.

Transparency

2.112 A common criticism has been that, despite the government's claims, the RFP process is not as 'open and transparent' as the government has stated it would be, particularly when considering the significant government funding outlay of $4.7 billion of taxpayers' money.

2.113 This criticism was heard repeatedly by the committee when prospective bidders were unable to elaborate on critical issues due to what has effectively become a gag order within the RFP. A clause within the RFP states that:

> Proponents should not communicate with or solicit information in relation to the RFP process from any government employee (or contractor), Minister or Minister's adviser other than the Contact Officer.
>
> The Commonwealth may preclude a Proposal from further consideration if the Proponent does not comply with any requirement of this clause 10.7, or based on any investigation carried out under this clause 10.7.[89]

2.114 Additionally, the document states in a later clause that an additional right of the Commonwealth is that it may:

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88 Mr Cheng, *Committee Hansard*, Perth, 6 November 2008, p. 4.

89 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraphs 10.7.5-6, p. 38.

> …at any time, in its absolute discretion and without providing reasons … decline to answer queries from any Proponent;[90]

This goes some way towards explaining why some proponents have mentioned to the committee that they have sought clarification on issues, such as footprint of the 98 per cent and the modelling of how this might be measured, as already highlighted in this chapter, but that these clarifications have not been forthcoming.

2.115 Although the government clearly provided several opportunities for the industry and the general public to provide comment in the form of written submissions, it was noted that this did not allow for two-way dialogue. Dr Ross Kelso noted this in his submission:

> It is difficult to appreciate how this process can be transparent and accountable … Neither the Panel of Experts nor the specialist advisors are required or are likely to publish their deliberations. … Whilst the tabling of submissions from industry and public interest groups does constitute a public process of consultation, such consultation is only one way communication. There is no process for official feedback nor further public scrutiny.[91]

2.116 When outlining his suggestions for public policy goals for the NBN, Dr Kelso again highlighted the lack of accountability, stating that:

> A prime goal in selecting the NBN provider and managing ongoing deliverables should be to ensure full transparency of process and public accountability for outcomes.
>
> It is totally unacceptable for agreements with the NBN provider to hide behind the cloak of 'commercial-in-confidence' secrecy. … [t]ransparency and accountability are crucial factors.[92]

2.117 Dr Kelso also criticised the government's launch of the RFP without establishing the desired regulatory framework and went on to highlight the subsequent importance of this Select Committee inquiry process:

> This Senate Committee offers the only opportunity for the consideration of public submissions by a body independent of the Department or its Minister.[93]

2.118 The lack of opportunity for either industry or public scrutiny was particularly a concern in relation to the regulatory regime. The government has invited suggestions for regulatory change, but has not provided an opportunity for industry

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90 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 11.2.1.7, p. 40.

91 Dr Ross Kelso, *Submission 24*, pp 2-3.

92 *Submission 24*, p. 8.

93 *Submission 24*, p. 3.

comment on the regulations under which they will be required to operate their businesses.

2.119 When questioned in Senate Estimates in October 2008, the minister would neither confirm nor deny that this opportunity would be provided. Rather, he indicated that he did not want the legislative process to be impeded by any additional consultation with either the industry or the customers who will be accessing broadband services under this new regime. The minister claimed that:

> We will go through the process of the NBN, we will then put forward a package of legislation, and if [the] opposition choose to block it, slow it or frustrate it, then it will be on your head.[94]

2.120 The minister was non-committal when asked at the same Senate Estimates hearing whether there would be an announcement of the successful proponent at the end of the eight week assessment period, which according to the government's revised timeline, should be towards the end of January 2009. In response to the committee's questioning, the minister responded:

> We are not intending to announce a winner and then try to negotiate an outcome.[95]

2.121 This sparked a lively discussion on whether it would be feasible for a contract to be signed with the successful bidder prior to the passing of legislation that would create the regulatory framework necessary to implement and administer the operation of the NBN. The minister continued to evade the issue, but did state that:

> …we will reach an agreement [with the successful bidder] and we will put forward – depending on the outcome of that [agreement] – any regulatory changes. …
>
> We are not going to be negotiating with your good selves about this issue once we have reached an agreement with the successful bidder.[96]

How the proposals will be assessed

2.122 The RFP states that the proposals will be assessed on:

> …the extent to which the Proposal meets the Commonwealth's [18] objectives for the NBN project. …

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94 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 26.

95 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 16.

96 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, pp 18-19.

> Within the framework of an overarching value-for-money assessment [against] the [six] evaluation criteria…[97]

There are eighteen Commonwealth objectives for the NBN initiative and six evaluation criteria, which are listed at appendix 2.

2.123 Criticism has been levelled at the timeframe for evaluating the bids that are submitted by proponents. The RFP states that the assessment process will be undertaken during an eight week period immediately following the closure of the RFP. The committee notes that, given the closure date is 26 November 2008, the assessment period will occur over the Christmas / New Year break, when most of the industry and government bodies will have closed down.

2.124 When the department was asked to clarify the timeframe for assessment, it became apparent that the Australian Competition and Consumer Commission (ACCC) would actually only have six weeks to examine all proposals and write its critical report on each for the government to consider during the last two weeks of the eight week process. Their assessment and report would be conducted in parallel with the assessment process conducted by the Expert Panel, who will the have an additional two weeks to consider the ACCC's report. Ms Patricia Scott, the Secretary of the department, explained the timeline:

> We are expecting the ACCC to provide written advice to the panel at the end of the six weeks of them examining the proposals. …
>
> It is expectation that the panel will commence its work on the receipt of the proposals on 26 November and that it will conclude its work at the end of eight weeks.[98]

2.125 At the Canberra hearing, the ACCC seemed very much aware that they would have a very limited time to provide a report that would be critical to the government's final decision. Although their responses were constrained by their role in this process, the comment was made that:

> I can assure you that Christmas has been cancelled for the relevant officers that will be working on this…our staff are expecting some long hours over this period…[99]

2.126 Through this discussion, the committee noted that the RFP states merely that the ACCC will have access to the final proposals 'as soon as is practicable'.[100] This

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97 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraphs 1.3.1 and 1.4.1, pp 5-6.

98 Ms Scott, DBCDE, *Estimates Hansard*, Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 20.

99 Mr Joe Dimasi, Executive General Manager, Regulatory Affairs Division, Australian Competition and Consumers Commission, *Committee Hansard*, Canberra, 8 October 2008, pp 76-77.

may well lead to the ACCC having less that the six weeks already mentioned. The committee believes that a more appropriate time for the thorough assessment of proposals and the subsequent report should be allowed by the government.

Conclusion

2.127 The committee questions the appropriateness of the timeline for the evaluation of the RFP, believing it will not permit the necessary level of scrutiny by either the Expert Panel or the ACCC to select the successful proponent for the NBN.

100 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 10.4.4, p. 36.

Chapter 3

Regulatory Revolution Required?

Introduction

3.1 When the government announced the National Broadband Network (NBN) Request for Proposals (RFP), it also announced that submissions would be invited for suggested regulatory changes, in a process running in parallel with the RFP process. The committee sees this as an acknowledgement of the common criticisms received from a broad range of broadband stakeholders regarding the shortfalls of the current regulatory regime. This chapter will explore those criticisms and outline the common themes for regulatory change, and related regulatory issues.

3.2 The overview of the RFP sets the framework for submissions to provide suggestions for changes to the regulatory regime of the telecommunications industry. The submissions to the Department of Broadband, Communications and the Digital Economy (the department) were invited on their website, which stated that:

> The Government is prepared to consider changes to existing telecommunications regulations to facilitate the roll-out of this network. … The Panel of Experts, which will be assessing proposals to roll out the National Broadband Network, will have access to all submissions and will be able to take them into account in evaluating proposals.[1]

3.3 Following the 25 June 2008 closing date, the department published all submissions on its website, making them available for prospective proponents to consider when preparing their proposals.

3.4 There are six evaluation criteria against which proposals will be assessed; criterion three refers to assessing any suggested changes to regulation, and is as follows:

> the nature, scope and impact of any legislative and/or regulatory changes that are necessary to facilitate the Proposal;[2]

3.5 The RFP later infers that there may be constraints to the nature of the changes that the government will consider:

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1 Department of Broadband, Communications and the Digital Economy (DBCDE), *Request for submissions on regulatory issues*, 2 July 2008, http://www.dbcde.gov.au/communications_for_business/funding_programs_and_support/request_for_submissions_on_regulatory_issues (accessed 18 November 2008).

2 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.4.1.3, p. 6.

> …these changes will be limited to those necessary to directly facilitate investment in the NBN, and [those which] will not jeopardise the Commonwealth's other objectives…[3]

Seizing the unique opportunity to make regulatory change

3.6 The majority of the submissions received by this committee have highlighted that the NBN initiative provides the government and the industry a prime opportunity to address the shortfalls of the current regulatory regime. Many strongly urged the government to make regulatory changes that would prevent duplication of the current regulatory failures. Comments made by Google in their submission are typical of those received by the committee:

> …fully embrac[e] this historic opportunity to construct an appropriate regulatory environment … that does not replicate known problems with the existing regulatory environment.[4]

3.7 Infrastructure Partnerships Australia (IPA) focussed their entire submission to this inquiry on the current regulatory framework and the changes they believe are required to achieve competition in the NBN environment, while safeguarding consumers and delivering on the government's vision. They believe that the NBN initiative:

> …provides an opportunity for the Government to consider a new approach to telecommunications' regulation which fosters competitive outcomes, encourages innovation and delivers the greatest social and economic return to Australia's business and domestic consumers.[5]

3.8 Terria acknowledges that, if the NBN was designed to develop the optimum capability for next generation telecommunications, Australia could produce a telecommunications industry that is 'second to none':

> This unique opportunity is not simply about technology or consumer, it is first and foremost about setting up an industry environment where competition and, therefore, consumer benefits come first. … [I]t needs to provide investor certainty and an effective regulatory framework.[6]

3.9 The Vodafone submission is also of the view that, if the new regulatory regime is carefully drafted and implemented, Australia could lead the world in achieving optimal outcomes through a competitive and innovative telecommunications environment:

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3 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.5.39, p. 13.

4 Google, *Submission 29*, pp 8-9

5 Infrastructure Partnerships Australia, *Submission 11*, p. 2.

6 Terria, *Submission 12*, p. 4.

> The NBN regulatory environment provides a unique opportunity … for the Government to become a global leader in reforming the telecommunications sector in a manner which enhances economic growth and consumer welfare as well as providing incentives for continued innovation and investment in the sector.[7]

3.10 The inquiry has heard claims that the current regime is in need of a thorough review, particularly in light of the rapid technological developments within the industry over the last decade. In fact, the Western Australian Chamber of Commerce and Industry (WA CCI) believes that because the changes are so significant, with no review of telecommunications legislation occurring over the last ten years, a 'full review of Commonwealth telecommuncations legislation' is now justifiable.[8]

3.11 In their submission, iiNet makes the comment that the NBN provides an opportunity to address some of the 'shortcomings inherent in the existing regulatory regime.'[9] Noting the unique opportunity to address these shortcomings that building the new network provides, iiNet makes the strong statement that:

> Critically, the network's construction is not only an historic step, but a major and historic opportunity to set in place an access and regulatory regime that will secure the future growth, innovation and competition in the information, communication and telecommunications sector.[10]

3.12 Building on this, iiNet believes that the government should establish a statutory access regime prior to awarding the contract to build the NBN:

> … the recent High Court judgement in Telstra Corporation v The Commonwealth (6 March 2008) reinforces the critical importance of setting in place a statutory access regime in advance of awarding any consortium the rights to build the National Broadband Network.[11]

3.13 Emphasising this point, the iiNet submission continues that the success of entire NBN initiative will be measured on the government's ability to establish an appropriate regulatory framework:

> The future access and regulatory regime will be a key determinant of the ability of the Federal Government to successfully implement its election policy and deliver on its commitment …[12]

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7 Vodafone, *Submission 9*, p. 13.

8 Western Australian Chamber of Commerce and Industry (WA CCI), *Submission 17*, p. 2.

9 iiNet, *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 5.

10 *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 3.

11 *Submission 3*, 'Access Seeker Requirements', 30 March 2008, pp 3-4.

12 *Submission 3*, 'Access Seeker Requirements', 30 March 2008, p. 4.

3.14 In evidence given at the Sydney public hearing, Mr Clive Poolman from AAPT also made reference to the NBN providing a chance to make the changes that his company believed are required to the existing regulations. He stated that:

> …with the advent of a new network … there is an opportunity now to do things in a different way, particularly from a regulatory perspective, to enhance and facilitate competition in the market.[13]

3.15 The committee also heard from those who believed that, because of the substantial contribution of public money to facilitate the roll-out of the new network, the government should insist on appropriate regulatory changes that would protect this investment of public money and ensure its objectives are achieved:

> …the fact that there will be a public investment in the National Broadband Network will ensure that there is some [government] control over the future of regulatory developments …[14]

3.16 The Western Australian Department of Industry and Resources aired similar views in their submission, also noting that appropriate regulation should not only support the government's stated objectives for the NBN, but would subsequently have a positive impact on investment in the industry:

> …regulation has a significant impact on investment incentives. The significant investment being committed by the Commonwealth Government … at this time presents an opportunity to adjust the current regulatory regime with minimal disruption to market outcomes. If the right changes are made then there is a good chance that a reformed regulatory framework will help to enhance investment signals.[15]

3.17 There is a general understanding that while there remains uncertainty in the level of protection offered by regulation for investors, there is no incentive for future investment and innovation, whatever the industry.

What not to allow in the new regulatory regime

3.18 Another view made clear to the committee was that the new framework should not provide any form of regulatory 'holiday' for the owner/builder of the network. This seems to be in direct reference to Telstra's submission to the department on their suggestions for regulatory changes to support the implementation of the NBN.

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13 Mr Clive Poolman, General Manager Strategy, AAPT, *Committee Hansard*, Sydney, 7 October 2008, p. 56.

14 Ms Teresa Corbin, Chief Executive Officer, Consumer Telecommunications Network, *Committee Hansard*, Sydney, 7 October 2008, p. 65.

15 Western Australia Department of Industry and Resources, *Submission 2*, p. 2.

Telstra's contrary views on regulation

3.19 While Telstra's submission echoes industry calls for significant reform of Part XIB and XIC of the *Trade Practices Act 1974*, it subsequently requests that these sections of legislation should not to apply to the NBN deployment. Some of the suggestions for regulatory changes in the Telstra submission are as follows:

- Existing ULLS and LSS access regulation should be removed within the NBN footprint;
- The access regulation is rolled back in competitive areas;
- New access pricing principles that would move from "cost-based" regulated pricing to "value-based" pricing approach;
- The NBN operator should not be required to provide wholesale versions of its own retail products;
- There is pricing flexibility at retail and wholesale levels, with scope to "experiment to discover demand and price levels"; and
- Ameliorate land access risks for the successful bidder to ensure they can meet the "aggressive build timeframe".[16]

3.20 Like other industry participants, Telstra raises throughout their submission that there is a 'fundamental flaw' in the current legislation. However, they believe that the answer lies in softening (or removing) the legislation and weakening the role and the powers of the Australian Competition and Consumer Commission (ACCC), whereas the majority of industry proponents call for regulations and the role and power of the ACCC to be strengthened. Telstra makes the statement that:

> The central problem is regulatory uncertainty. The cause of this uncertainty is the excessive discretion vested in the ACCC in both determining its own remit by declaring which services will be regulated and then in determining the terms of access.[17]

3.21 Their submission subsequently requests that the current role of the ACCC is significantly reduced, almost removed, so that there is a 'single process',[18] inferring that the ACCC acts to hinder rather than protect the industry and its customers:

> The burden to satisfy the ACCC, which can reject an undertaking on fairly arbitrary grounds, is virtually impossible …[19]

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16 See Telstra's summary of specific regulatory proposals: Telstra, *Public submission on the roll-out and operation of a National Broadband Network for Australia,* 25 June 2008, pp 20-21.

17 Telstra, *Public submission on the roll-out and operation of a National Broadband Network for Australia,* 25 June 2008, p. 23.

18 Telstra, *Public submission on the roll-out and operation of a National Broadband Network for Australia,* 25 June 2008, p. 22.

19 Telstra, *Public submission on the roll-out and operation of a National Broadband Network for Australia,* 25 June 2008, p. 24.

3.22 These requests by Telstra are precisely what the industry has warned the government not to allow, as noted by Optus in their submission:

> The consequences for competition and Australian consumers under [Telstra's regulatory] proposal would be dire. Telstra's position must be rejected.[20]

Appropriate regulation with consistent application

3.23 While the AAPT strongly criticises the current regime, their submission continues that the solution will not lie in merely increasing the level of regulation:

> AAPT submits that it is clear that the current regulatory regime is both inefficient and ineffective. It does little to mitigate the anti-competitive conduct of Telstra as the largest network provider and instead results in an environment fraught with anti-competitive conduct, gaming and uncertainty. … However, more regulation is not the answer, appropriate legislation is.[21]

3.24 According to AAPT, an 'appropriate' framework for legislation or regulation would be achieved through the alignment of incentives within the appropriate market structure, which in turn would support the key principles of regulation required for the new network.[22] AAPT are not alone in their views; however the issue of how the successful bidder should structure its business will be discussed later in this chapter.

3.25 Competitive Carriers Coalition (CCC) believes that regulation should aim to shape the competitive market, given that the NBN will most likely be a natural monopoly. Their submission compares the regulation of the telecommunications industry to that of other basic utilities and their supporting infrastructures:

> In areas where there is not substitutability between two [infrastructure providers], we regulate to create competitive retail markets by separating the monopoly deliver[ed] infrastructure from the sale of the actual product. … We regulate this way because consumers buy services, not wires or empty pipes.[23]

3.26 Vodafone points to another shortfall in the manner in which the current regulations are inconsistently applied. Vodafone contends that currently there is a bias towards fixed networks, and that any new regime must be applied equally to all parties. As Australian and global digital economies become increasingly reliant on the convergence of fixed and wireless networks, the regulatory environment will need to support this convergence, rather than favour one technology platform over another:

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20 Optus, *Submission 19*, p. 3.

21 AAPT, *Submission 4*, p. 9.

22 *Submission 4*, p. 9.

23 Competitive Carriers Coalition (CCC), *Submission 8(b)*, p. 1.

> Australia's future prosperity and the growth of the digital economy will be supported through a combination of fixed and wireless networks. In this environment it is important to avoid a regulatory regime that inconsistently applies the principles on which it is based.[24]

3.27 The submission highlights this inconsistency with the example where the current regime maintains:

> …higher levels of regulation in respect of privately funded mobile networks operating in highly competitive markets, while conceding lower levels of regulation to monopoly infrastructure that has also enjoyed the benefits of Government funding.[25]

Objectives for devising appropriate regulation

3.28 The government has clear objectives (see appendix 2) that the new broadband network must achieve; it is critical that any new regulations will facilitate achieving these objectives and provide ongoing support to maintaining them.

3.29 In addition to specifying the footprint coverage and speed of the network, these objectives include that the network continues to promote the long-term interests of end-users (LTIE), that it has the capacity to be upgradeable over the lifetime of the project, that it facilitates competition through open access, and that it enables low access cost-based prices while allowing proponents a rate of return on their investment.

3.30 Given the commitment of public monies to fund this initiative, the new regime should also be guided by basic public policy principles. An additional consideration should also be the 'social inclusion' focus that the government has placed as a priority in its overall policy agenda. However, Professor Trevor Barr argues that inclusive public policy is actually one of the 'neglected agendas' in this debate. Professor Barr discusses the complex social and cultural factors that affect consumer choice of technology and services and states that consequently:

> The best new technologies and services will be those that are created, designed constructed and marketed in ways that will be highly ***adaptive*** to human needs in user environments of the future.[26] [bolded italics copied]

3.31 When discussing the broad principles that should underpin new regulation, Professor Joshua Gans made the comment that:

> **The Government should view itself as designing a market rather than a regulatory bureaucracy and process.**[27] [bolding copied]

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24 Vodafone, *Submission 9*, p. 7.

25 *Submission 9*, p. 7.

26 Professor Trevor Barr, *Submission 13*, p. 6.

27 Professor Joshua Gans, *Submission 15*, p. 3.

WA Chamber of Commerce and Industry's principles

3.32 The Western Australian Chamber of Commerce and Industry (WA CCI) provided the inquiry with a submission that outlined basic principles that would lead to the creation of a sound regulatory regime for the NBN. The WA CCI stated that when drafting the new framework, the government should aim to achieve a 'reasonable balance between protection and regulatory cost':

> Regulatory design should achieve competitive neutrality, transparency and have minimal overlap and duplication.[28]

3.33 When drafting new regulations, the WA CCI advises that there needs to be an appropriate balance between efficiency and effectiveness of the new regulations, which should foster competition, economic growth, innovation and prime social objectives.

3.34 The WA CCI submission included a discussion paper they had published in 2006, which had determined key principles that government departments could apply to shape and inform regulatory activity. Of the seven basic principles within this discussion paper, the WA CCI notes that five are very relevant to the implementation of the NBN; these five principles are as follows:

1. government intervention should be minimal and the least preferred option for achieving policy outcomes;
2. regulation should be outcomes based rather than process based;
3. regulation should not be overly prescriptive with minimum requirements such as speed limits;
4. regulation should be created with sound social and economic purpose, requiring governments to fully asses all legislative and regulatory proposals against a regulatory impact statement; and
5. the Government should regularly review and remove redundant regulation.[29]

3.35 The WA CCI 'strongly recommends' that these principles guide the creation of any new regulatory framework for the NBN.

3.36 Within the WA CCI discussion paper was another set of regulation principles that was drafted by the Business Council of Australia (BCA). These principles were drafted by the BCA as a solution to 'curtail the tide of government red tape' and were intended for use by both Commonwealth and state government departments. The BCA principles mirrored those of the WA CCI, and included that:

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28 WA CCI, *Submission 17*, p. 2.

29 *Submission 17*, p. 2.

- regulation should be the last, not first, response of Government and the benefits of proposed regulation should always outweigh the costs of administration and compliance;
- regulation should set a framework, not try to cover the field;
- all businesses, whether large or small, should be treated equally; and
- there must be full transparency and accountability around the processes for making and administering regulation.[30]

3.37 Apart from the suggestions for general principles that would produce an efficient and effective regulation regime for the new network, there was a stated need for the regulatory principles to strive for social benefits, considering the use of taxpayers' dollars to fund the NBN. This view was expressed by iiNet in the submission on regulatory issues that they provided to this inquiry as a supplementary submission:

> The General principles that need to be applied to the regulatory improvements are those aimed at a social dividend, that have been in place for some time and are expressed by government policy:
>
> - Promoting competition;
> - Promoting long term interests of the end user; and
> - Ensuring equitable service provision to all Australians.[31]

3.38 The Communications Expert Group (CEG) stated that having clear policy objectives was one of the key issues for the development of the NBN, with the 'core' objectives incorporating the long-term interests of end-users (LTIE).[32]

3.39 The objectives stated within the RFP certainly address several common principles highlighted by submitters and witnesses alike, such as the promotion of the LTIE, facilitating competition through open access arrangements, and ensuring equivalence of price and non-price terms and conditions.

Regulatory certainty a priority issue

3.40 There has been criticism that the objectives within the RFP were not sufficiently specific for prospective proponents attempting to frame their proposals. In particular, criticism was levelled at the government for not putting in place a basic regulatory framework within the RFP on which prospective bidders could build a business model, thus providing greater surety that bids would compete, and be subsequently assessed, on truly equal terms.

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30 WA CCI, *Submission 17*, Attachment: 'Regulation and Compliance: A Discussion Paper', WA Chamber of Commerce and Industry, November 2006, p. 18.

31 iiNet, *Submission 4*, 'Regulatory Submission', June 2008, p. 5.

32 Communications Expert Group, *Submission 31*, p. 2.

3.41 Dr Ross Kelso was asked his views on the manner in which the RFP was released without the government providing guidance on the regime under which the NBN might operate:

> I totally agree with the sentiment that the cart has been put before the horse; the regulatory arrangement of the framework should have been done first.[33]

3.42 At the first Canberra public hearing, the committee heard a similar call from the Executive Director of IPA. When questioned whether IPA believed that any regulatory changes should be completed prior to the RFP being released, Mr Lyon replied:

> Of course, … [w]e would view getting the regulatory frameworks as being fundamental and necessary. … [Y]ou need to provide a level of regulatory certainty around the future shape of the market. … We would say that legislation would need to be in place and that certainty will need to be around the future shape of the market and a regulatory regime that exists …[34]

3.43 At the Perth hearing, iiNet stated that they believed that the NBN would not provide the right solution for Australia, and also made comment about the lack of a new regulatory framework being in place prior to the RFP being released, and called for a bipartisan approach to resolving the regulatory issues:

> …[service providers] will not return to this until they have the confidence to invest back in the sector.
>
> That, again, comes down to the government coming forward – and I mean all of you, both sides – and saying, 'Here is the rule book, guys.' Even of the news is bad for us, at least our investors can make informed choices.[35]

3.44 Mr Malone was further questioned on whether he believed that it would therefore be preferrable to delay the NBN until effective legislation was in place, to which he responded quite emphatically:

> I would rather a deferred solution rather than a stupid one. At the moment, you are delivering me a stupid one.[36]

3.45 Ms Deanne Weir from AUSTAR was also adamant that there should have been regulatory certainty in place prior to the NBN RFP being released:

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33 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 18.

34 Mr Brendan Lyon, Executive Director, Infrastructure Partnerships Australia, *Committee Hansard,* Canberra, 8 October 2008, p. 24.

35 Mr Michael Malone, Managing Director, iiNet Ltd., *Committee Hansard,* Perth, 6 November 2008, p. 33.

36 Mr Malone, iiNet Ltd., *Committee Hansard*, Perth, 6 November 2008, p. 33.

> …we think it is actually very critical that there be proper regulatory rules. That is one thing that concerns us about how this is played out – that the regulatory rules have not been set prior to the tenders being called for …[37]

3.46 Criticism was also made in relation to there being no regulatory regime to guide the actual assessment of the NBN tenders. At the Melbourne public hearing, Mr Kevin Morgan commented to this effect:

> You have to have an objective set of criteria to assess a tender if you do not want to end up in the courts.
>
> How can you possibly objectively assess a tender where the key regulatory inputs are not known? Regulation goes to the issue of risk and you cannot build a business case without understanding the risk because no-one will give you money. …Unfortunately, I have to say this process is fatally flawed. …
>
> Until you have regulatory reform this cannot go ahead. Until you have set regulatory rules you cannot go ahead.[38]

3.47 There are also strong calls for the regulation to incorporate or even mandate some form of separation within the owner/operator of the NBN. The issue of restructuring the industry is pivotal within the NBN debate, and will be discussed later in this chapter.

Conclusion

3.48 The committee considers that the government should have provided a regulatory framework within the RFP; this would have provided proponents with greater certainty in building their business case for the NBN, while also providing a legal framework for the assessment of proposals.

Telstra's current conflict of interest

3.49 Despite the almost universal criticism of Telstra's vertical integration that facilitates its abuse of the strong market position it holds, the committee heard from a number of people who identified an almost 'catch-22' situation for Telstra.

3.50 Being now totally owned by shareholders, Telstra is bound by commercial law to ensure that it acts in the best interests of its shareholders. Conversely, Telstra is the owner of telecommunications infrastructure, which provides essential services for Australian homes and businesses. As a service provider, Telstra is also bound by legislation to serve the best interests of its customers. As an example of these comments, Adam Internet stated in their submission that:

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37 Ms Deanne Weir, Group Director, AUSTAR United Communications Ltd, *Committee Hansard*, Sydney, 7 October 2008, p. 13.

38 Mr Kevin Morgan, *Committee Hansard*, Melbourne, 28 October 2008, p. 85.

> It is unreasonable to expect a listed corporate entity to put the interests of its competitors, the broader industry or Government policy ahead of its fiduciary obligations to its shareholders.[39]

3.51 The WA Chamber of Commerce and Industry also recognised this in their submission:

> …a conflict of interest arises when a monopoly carrier is required by law to provide network access to its retail competitors, and is also required by law to maximise the return to its shareholders.[40]

3.52 Although the WA CCI welcomes the government's commitment to constructing the NBN as an open access network and to implement regulatory reform to achieve this, the submission continues:

> …the Chamber does not believe that an open access network goes far enough [and] considers the structural separation of the wholesale and retail infrastructure of the NBN to be an effective model.[41]

3.53 The WA CCI also submits that by separating the wholesale and retail units, the government will actually 'reduce the need for long term government regulation.'[42]

3.54 Although Telstra's motive for its anti-competitive behaviour has been generally acknowledged, this fact does not change the impact this behaviour has on the industry and Australian consumers alike:

> While Telstra's anti-competitive activities can be seen as rational attempts to protect its market share, these actions are clearly not in the national interest. The national interest is best served through competition in the telecommunications sector.[43]

3.55 The committee heard on a number of occasions the opinion that this conflict of interest cannot be resolved unless the vertical integration of Telstra's business operations and units is further separated. Witnesses expressed concern that without this separation, Telstra would continue to place the interests of its shareholders above the interests of its customers and the Australian people, and ultimately affect the ability of Australian businesses to compete internationally.

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39 Adam Internet, *Submission 25*, p. 7.

40 WA CCI, *Submission* 17, p. 3.

41 *Submission* 17, p. 3.

42 *Submission* 17, p. 3.

43 Infrastructure Partnerships Australia, *Submission 11*, p. 5.

Conclusion

3.56 The committee concludes that omitting to specify the structure of the new network has caused confusion and uncertainty among potential bidders and industry stakeholders.

Failures of the current regime

3.57 The extent of the failure of the current regulatory regime can be highlighted by the fact that even Telstra, which holds unrivalled market power in the Australian telecommunications industry, has called for a complete review of the legislation. The submissions to the inquiry are mostly general in their areas of criticism, although a number have given considerably detailed descriptions of legislative amendments that would be desirable. This Interim Report will report on the general areas of failure of the current regime, with the final report providing more in-depth examination of those changes.

Original intent of the legislation

3.58 When the government first offered shares in Telstra, significant changes were made to the *Trade Practices Act 1974;* the objective of these changes was to facilitate competition in the telecommunications industry through the application of general competition law principles combined with telecommunications specific access regulation. This regime was introduced in 1997, leaving Telstra as a vertically integrated entity, on the assumption that the ACCC could exercise effective control over Telstra with the aid of telco-specific powers. Part XIB of the new regime was to deal with any future abuses of market power while Part XIC was to regulate access to services. However, that assumption was soon proven to be misguided:

> With over eleven years experience, we now know that these provisions have proved inadequate to control Telstra and to provide a genuine level playing field for competitors seeking to compete with Telstra in the provision of fixed line services.[44]

'Gaming' the regime

3.59 The practice of 'gaming' the regulatory system was a common complaint to this inquiry. Under Part XIC, access seekers are to 'negotiate' access terms, conditions and prices with Telstra. However, the concept of negotiation is reliant on two parties striving for a win/win outcome; negotiation is *not* possible if one side, particularly the side with the market power, is not motivated to even come to the negotiating table. Many have commented that this negotiate/arbitrate model is an abject failure because of this:

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44 Optus, *Submission 19*, p. 22.

> The negotiate/arbitrate model under Part XIC has proven to be a failure. It has provided Telstra with both the incentive and the means to game the system to its advantage.[45]

3.60 Optus elaborates on how Telstra is able to frustrate the decision making process, succinctly summarising statements made by others, as follows:

> (a) It employs a take it or leave it approach to commercial negotiations, which are treated merely as stalling devices. It rarely engages on issues and blatantly uses information asymmetries to undermine the negotiating process.
>
> (b) The undertaking process is used as a means to undermine the ACCC's price signalling processes and delay arbitral decisions.
>
> (c) The arbitral process is stymied by constant questioning of the due process and issues of jurisdiction.[46]

3.61 The gaming process utilised by Telstra can cause significant delays to access seekers, which are consequently unable to provide terms and conditions of access, or even basic pricing of access, to their potential customers, who are often subsequently wooed to Telstra.

3.62 The provisions of Part XIB were to provide an alternative mechanism for the ACCC to use in cases where there was a need for efficient and effective enforcement action to address anti-competitive behaviour. However, these have also proved to be ineffective over the years. Optus claims that the provisions are 'far too weak', in addition to being expensive to pursue. According to Optus:

> Telstra can enjoy months and even years of benefit from anti-competitive conduct before a matter is investigated and sanctions imposed.[47]

3.63 Not only are they ineffective, but even when an anti-competitive notice is applied, Telstra is able to ignore it for months, and even then is only required to pay a small monetary amount, which Optus likens to a 'minor speeding ticket type fine.'[48] This has resulted in the ACCC signalling an unwillingness to use its powers under Part XIB. According to Optus, this is due to the fact that the ACCC's powers to regulate access are:

> …often ill-defined and limited by various rights of appeal. … The legal strait jacket within which the ACCC has to operate is demonstrated by the ACCC's recent revelation that it is currently involved in 47 legal actions initiated by Telstra.[49]

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45 Optus, *Submission 19*, p. 22.

46 *Submission 19*, p. 22.

47 *Submission 19*, p. 23.

48 *Submission 19*, p. 23.

49 *Submission 19*, p. 24.

3.64 These claims are in sharp contradiction to the claims made by Telstra in their submission to the department requesting regulatory changes. According to Telstra, it is the ACCC which is the cause of delay in the decision making process, and consequently Telstra calls for the powers of the ACCC to be curtailed and indeed for their role to be all but eliminated in the decision making process.

3.65 In an attempt to address the emerging increase of anti-competitive behaviour, Telstra was required in 2005 to implement operational separation. However it seems that these requirements have also been ineffective. The ACCC itself was asked whether it believed that the current form of operational separation had proven effective for promoting equivalence between Telstra and its competitors; their response was:

> …probably no. We continue to receive complaints of conduct that suggest that the objective of equivalence, which was the objective of the regime, is not being achieved.[50]

3.66 The Competitive Carriers Coalition makes the comment that, after years of unsatisfactory policy advice, the industry now has little confidence that the department fully understands the 'needs and motivations of non-Telstra businesses'. Using as an example the 2005 amendments that required Telstra to operationally separate, the CCC submits that:

> Warnings, both public and private, by the non-Telstra industry that the proposed arrangements would fail completely were ignored by the Department. These warnings have subsequently been completely vindicated.[51]

More than a new regime required

3.67 As previously mentioned, stakeholders have highlighted that open access must be supported by appropriate changes to regulation, with many advocating structural changes to the industry itself to prevent anti-competitive behaviour by what will undoubtedly become a powerful monopoly provider. Although the definition of open access may appear to be reasonably clear within the RFP, the fact that the advocated restructure of the industry is not assured as a component of the NBN is a cause for concern.

3.68 This concern was exacerbated when Telstra openly stated that it will not be a part of the NBN process if structural separation is a mandated prerequisite. During their appearance before the committee, Telstra reiterated their media statements to this effect, categorically stating that:

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50 Mr Graeme Samuel, Chairman, Australian Competition and Consumer Commission (ACCC), *Estimates Hansard,* Senate Standing Committee on Economics, 5 June 2008, p. 58.

51 CCC, *Submission 8,* 'Submission in Response to the Minister's Invitation for Comments on Telecommunications Regulation', p. 22.

> Telstra's position is that if further separation is part of the NBN then we are not in a position either to build or to bid for the NBN.[52]

3.69 At the Canberra public hearing, representatives of the Competitive Carriers Coalition discussed at length the disadvantages of the current industry structure and its close relationship with the availability open access. Mr Matthew Healy stated that:

> … it is the structure of the industry rather than simply the regulatory settings that we have at the moment that makes it difficult, if not impossible, to have open access. … It is not so much the regulatory settings as it is the structure of the industry that militates against an open access arrangement.[53]

3.70 At the same hearing, representatives from the Terria consortium, which is one of the major proponents for the NBN, also tied the achievement of open access to the structure of the successful owner of the NBN. Mr Michael Egan, Terria's Chairman, made the statement that:

> If the national broadband network is to fulfil its potential, it must be an assured open access network … and we believe that will happen only if the NBN is properly regulated … [and] is an independent network not controlled by any retailer or group of retailers, and not providing its own retail services.[54]

3.71 Mr Michael Simmons continued this line of association when he added that:

> Terria's position on open access is that all access seekers would have equivalent both non-price and price access terms in accessing the network and that would be guaranteed by having a separated and independent network between the network owner-operator and all access seekers.[55]

Options for separation

3.72 There was a general consensus that any new regulations that underpin the NBN should ensure that any operator/owner of the new network cannot participate in anti-competitive behaviour. This is reinforced by the objective of the NBN which states that there is to be open access to the network and that the NBN regime facilitates and supports competition and innovation in the telecommunications sector.

3.73 Many have made calls for the network owner to be structurally separated from any downstream retail business units. The common thought is that this would be the most effective way to ensure true open access, and would actually reduce the need for

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52 Mr David Quilty, Group Managing Director, *Committee Hansard*, Canberra, 11 November 2008, p. 5.

53 Mr Matthew Healy, Chair, CCC, *Committee Hansard*, Canberra, 8 October 2008, p. 2.

54 *Committee Hansard*, Canberra, 8 October 2008, p. 32.

55 Mr Michael Simmons, Managing Director, Terria, *Committee Hansard*, Canberra, 8 October 2008, p. 33.

regulations. This is because, if the NBN owner has no retail interests, then its business imperative will be to its own interests and business performance, which will consequently drive incentives to maximise the use of the network by access seekers. As Optus comments in their submission:

> This change in incentives … can be expected to flow through to a more competitive and diverse broadband market. This in turn will deliver very tangible benefits to customers in the form of lower prices and more innovative services.[56]

3.74 Mr Paul Budde echoed this sentiment in the closing statement of his submission:

> Sound infrastructure based (structural) regulations based on open networks will also reduce the currently high level of regulations required for the services carried out over this infrastructure.[57]

3.75 In a report commissioned by Optus, the statement is made that if the owner is vertically separated, this automatically removes the incentives for the owner to act in an anti-competitive manner. Where there is less incentive for such behaviour, it follows that there will be a reduction in the amount and extent of regulation that would be required for the NBN. The report builds on this concept, stating that:

> Structural separation greatly reduces the job of regulating the monopoly network because the regulator no longer has to deal with the efforts of the network owner to 'get around' the access regulation and transfer its monopoly to the competitive part of the market.[58]

3.76 However there are other comments that not only is the operational separation model implemented under current Australian regulations not effective in even reducing, let alone eliminating, anti-competitive behaviour, the model used in Australia is not as effective as others in use internationally:

> …current arrangements in Australia for dealing with non-discrimination and the leverage of market power are weak and do not constitute the robust models of functional or operational separation applied in New Zealand and the UK.[59]

3.77 It is perhaps beneficial at this point to summarise the variations in the degrees of vertical separation, which range from full vertical integration through to full structural separation. The table below has been taken from the report within the Optus submission, authored by the Competition Economists Group, *Structural Separation*

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56 Optus, *Submission 19*, p. 28.

57 Paul Budde Communication, *Submission 1*, p. 4.

58 Optus, *Submission 19*, Attachment: Competition Economists Group, 'Structural Separation for a National Broadband Network: A report for Sing-Tel Optus', May 2008, p. 2.

59 Optus, *Submission 19*, Attachment: Competition Economists Group, 'Structural Separation for a National Broadband Network: A report for Sing-Tel Optus', May 2008, p. 7.

for a National Broadband Network: A Report for Sing-Tel Optus. The lowest degree of vertical separation shown is accounting separation; the highest is structural or ownership separation:

Table 1: Forms of vertical separation.

Rating	Type of organisational separation	Features
7	Ownership separation	Full structural separation – may involve club ownership of bottleneck
6	Legal separation (separate legal entities under common ownership)	Legal separation (which may or may not embody elements of functional separation)
5	Functional separation with localised incentives and/or separate governance arrangements	Variants on functional separation
4	Functional separation	
3	Virtual separation	Variants on accounting separation
2	Creation of wholesale division	
1	Accounting separation	

3.78 Accounting separation involves the organisation compiling separate profit and loss statements and balance sheets for all separate entities within, and can be accompanied by the creation of a special, separately named wholesale unit. This appears to be the current form of separation under which Telstra, and its wholesale subsidiary, BigPond, operate.[60]

3.79 Virtual separation requires organisations to establish retail, access and wholesale divisions, creating service level agreements intended to ensure that no discrimination occurs. In practice it will necessitate new training for the workforce to ensure that employees respect the new but virtual divisions within the company.

3.80 Functional separation will see the provision of incentives for senior managers in the separated entity, and/or separate governance arrangements. The next step would be legal separation, seeing the creation of a separate board and the filing of separate statutory accounts.[61]

60 Optus, *Submission 19*, Attachment: Competition Economists Group, 'Structural Separation for a National Broadband Network: A report for Sing-Tel Optus', May 2008, pp 12-14.

61 Optus, *Submission 19*, Attachment: Competition Economists Group, 'Structural Separation for a National Broadband Network: A report for Sing-Tel Optus', May 2008, pp 12-14.

3.81 The greatest degree of vertical separation is structural separation, where there is separate ownership of the separated assets.[62]

3.82 The mammoth policy question facing the department is to what degree should the regulations mandate separation for the new network operator. There are those who believe that structural separation is not the only answer or in fact may not be necessary, as long as the appropriate regulations are in place:

> …strictly speaking, [structural separation] is not absolutely necessary. It is desirable … but it is not absolutely necessary. If you set up the correct regime, you can achieve open access without structural separation.[63]

3.83 However, Dr Kelso later gave the constraint that if structural separation was not implemented, the new regime would need to clearly prescribe the conditions of open access, which he explained as similar to everyone having the right to use the roads in Australia:

> The Trade Practices Act does not prescribe open access. Open access means a right of access. Under Part XIC of the Trade Practices Act we do not have a right of access.[64]

3.84 A form of functional or operational separation would be another alternative, although some believe this to be a less effective model which would most likely require a comparatively greater degree of regulatory control:

> Operational separation simply does not work. A value chain where the supplier of a critical service to a market also competes with each of its customers in that market is simply dysfunctional.[65]

3.85 Vodafone has submitted that their preference would be for structural separation to be implemented as an NBN component, and concedes that functional separation would be an inferior alternative:

> Vodafone considers that the only viable alternative to structural separation (albeit less suitable) is to implement a model of full functional separation … similar to that which has been implemented in the United Kingdom … and will be implemented in New Zealand.[66]

3.86 Optus agrees with the fact that operational separation would not be as effective as structural separation, stating that:

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62 Optus, *Submission 19,* Attachment: Competition Economists Group, 'Structural Separation for a National Broadband Network: A report for Sing-Tel Optus', May 2008, pp 12-14.

63 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 21.

64 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 22.

65 Axia NetMedia Corporation, *Axia Submission to the Australian Competition and Consumer Commission: Suggested Regulatory Priorities and Approaches for the Australian National Broadband Network*, 25 June 2008, p. 2.

66 Vodafone, *Submission 9,* p. 15.

> The operational separation arrangements that apply to Telstra are wholly ineffective.[67]

3.87 Both the department and the minister have claimed that the government does not favour any model of separation, and that the RFP remains non-prescriptive to allow the greatest level of flexibility for proponent network design. At the Canberra public hearing, Mr Colin Lyons from the department commented that:

> … the request for proposal is an outcome focused document, not a mechanism focused document. It does not prescribe that certain structures or mechanisms are essential to achieve particular outcomes.[68]

Conclusion

3.88 The committee supports the general consensus that any new regulations that underpin the NBN should ensure that any operator/owner of the new network cannot participate in anti-competitive behaviour.

*Is **no** regulatory change an option?*

3.89 The committee heard from the Canadian telco company, Axia NetMedia, at a Canberra public hearing; this organisation gave a totally new perspective on the issue of separation. The Chief Executive Officer of Axia NetMedia, Mr Art Price, explained that the degree of separation depends on the objective of the network implementation, and based the following explanation on examples where Axia NetMedia had rolled out a new broadband infrastructure in three international locations, each with varying demographics and geographic issues to overcome.

3.90 According to Mr Price, the issue comes down to a simple principle that has been applied in all three initiatives. This principle is: 'Competing With Your Customer Does Not Work'.[69]

3.91 Mr Price explained that, wherever you have the network owner also supplying network services, they are automatically placed in a position where they need to compete with the very customers on whom they also rely for business, which in the case of the NBN would be all access seekers. This naturally leads the network operator to favour their own services in pricing and conditions of service over those of their 'customers'. As Mr Price said:

> The practical thing is that the owner of [a non-vertically integrated] network needs to survive based on the success of their customers, as opposed to surviving based on their customers failing, and the success of the [vertically

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67 Optus, *Submission 19*, p. 24.

68 Mr Colin Lyons, Deputy Secretary, National Broadband Network Taskforce, DBCDE, *Committee Hansard*, Canberra, 8 October 2008, p. 58.

69 See for example, *Committee Hansard*, Canberra, 24 November 2008, pp 1 and 4.

> integrated] incumbent is actually better if they keep those retail services themselves.[70]

3.92 Mr Price advocates that Axia aims to completely reverse this objective, so that the survival of the operator/owner depends on the survival of their customers. This will automatically create the incentive for the operator to attract the greatest possible volume of business – i.e. access seekers – to utilise the new network, with the consequence of creating competitive marketing tension that is beneficial to the network operator, to its customers, the access seekers, and particularly to the benefit of the long term interest of end users:

> …to get a high performing end result and choice for the end users, the party who has the next generation network should not be competing with its own customers.[71]

3.93 In the implementation of their solution for broadband in the state of Alberta, Canada, Mr Price noted that the state has no jurisdiction for regulating broadband infrastructure and operation. An astounding revelation in the evidence given by Mr Price was that, as there was no jurisdiction for creating new regulation, Axia merely applied this principle of the operator not competing with its customers.

3.94 Axia NetMedia has succeeded in providing 100 per cent of the state's population with access to a high technological solution, with high service quality levels, yet ***without*** any regulation being applied to the sector. By merely adhering to the above principle, they have been able to create an environment where the market thrives and there is no need for regulation:

> That is quite different than saying the incumbent must structurally separate. … if you think of the three places we did this, the government did not require the incumbent in any of those places to structurally separate, but they got a structurally separated outcome … from a party other than the incumbent.[72]

3.95 When examined more closely, the application of this fundamental principle actually addresses many of objectives or principles that were cited earlier in this chapter, including the following:

- Professor Joshua Gans' view that the government should create regulations that design a shape the market environment;
- The WA Chamber of Commerce and Industry's comment on the need to design regulation that will achieve competitive neutrality and transparency, and that government regulations should be minimal and be outcomes based rather than process based;

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70 Mr Arthur Price, Chairman and Chief Executive Officer, Axia NetMedia, *Committee Hansard*, Canberra, 24 November 2008, p. 9.

71 Mr Price, Axia NetMedia, *Committee Hansard*, Canberra, 24 November 2008, p. 7.

72 Mr Price, Axia NetMedia, *Committee Hansard*, Canberra, 24 November 2008, pp 7-8.

- The Business Council of Australia's similar view that regulation should be the last, not first, response of government; and
- iiNet's view that regulation should promote competition, promote the long term interest of end users and ensure equitable service provision to all Australians.

3.96 The Axia NetMedia principle underscores the previously stated views that separation of the operator from upstream retail services will reduce, or indeed remove the need for regulation.

A flawed process?

3.97 Criticism of the timeframe for the assessment and evaluation of the proposals has already been discussed in chapter 2. However, in the context of the regulatory changes that have been called for to support the new network, this timeframe is highlighted again in this chapter.

3.98 When the government announced the Request for Proposals in April 2008, it also announced that the general public and the industry was invited to provide the department with submissions on regulatory changes that might facilitate and underpin the smooth implementation and operation of the NBN. Submissions closed on 25 June 2008 and were published on the department's website, so that prospective bidders could augment their proposals with the suggestions for change. The response by the public, and in particular the industry, was substantial, with over eighty submissions, many of which had multiple supplementary attachments.

3.99 While the government did invite suggestions for regulatory changes, and has published them, criticism of their actions comes on two levels. Firstly there is the criticism that the timeframe not only for the assessment of proposals, but for the legislative and parliamentary processes required to make the changes to the regulations and legislation, is inadequate. Secondly, there is the call for public consultation, or at least consultation with the industry, on any drafted changes to legislation or regulations, prior to the legislation commencing the usual course through parliamentary process.

Lack of time

3.100 The RFP states that the rollout of the network will commence early in 2009; however, with the closing date for proposals being pushed back until 26 November 2008, and the required eight week evaluation of those proposals, this date will obviously not be met. Although the government has been criticised for this delay, this is not the main concern of the industry.

3.101 The criticism levelled by the industry is that the government should now actually further delay the roll-out of the NBN to allow time for consultation on the proposed regulatory changes:

> I would recommend … for the government to issue a discussion paper based on its assessment of the submissions on the regulatory framework and this discussion paper then be open for public evaluation. …[73]

3.102 The industry is very cognoscente of the time taken to draft legislation, and the need to allow for its passage through due parliamentary process. There is genuine concern that if the government endeavours to meet the timeframe it set as an election commitment, there will be insufficient time to enable thorough consideration of all issues raised in the regulatory submissions to the department.

3.103 The strong preference expressed to this inquiry is for sufficient time to be taken to enable the appropriate regulation and/or legislation to be drafted, to ensure that the government 'gets it right' the first time, rather than draft ineffective regulations that would hinder the progress of the NBN implementation, and may well require ongoing amendments to support the operation of the NBN. As the Australian Telecommunications Users Group notes in their submission:

> If more time in the planning and coordination phase is needed … that time should be taken.[74]

3.104 In fact, at the Brisbane hearing, Dr Kelso took this further by saying that the restriction of the assessment period to eight week is not critical and should be extended:

> …I would say that the eight-week and six-week time lines … are really not that critical. There is nothing urgent about implementing this national broadband network. Things can slip by for a few more weeks, a few more months or whatever.[75]

Time in context of the contract

3.105 A key objective of the RFP quite clearly states that the time required for the completion of the NBN rollout to 98 per cent of all Australian homes and businesses is five years:

> [the NBN] is rolled out and made operational progressively over five years from the date of execution of a contract between the Commonwealth and the successful proponent.[76]

At the time of writing this Interim Report, the government remained firmly committed to a five year completion schedule, as stated in the RFP.

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73 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 19.

74 Australian Telecommunications Users Group, *Submission 7*, p. 4.

75 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, pp 18-19.

76 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia,* 11 April 2008, paragraph 1.3.7, p. 5.

3.106 Given that this time commences on the signing of a contract, at the Senate Estimates hearings in October the minister was also questioned in relation to the timing of the contract signing once the successful bidder had been announced.

3.107 Senators on this committee questioned whether it was feasible for any contractor to commence work on the build of the NBN when the terms and conditions, i.e. the regulatory framework, had not been finalised. In the context of the RFP, should the successful bid be conditional on changes to regulation and/or legislation, then passage of those changes must be subject to parliamentary scrutiny. Consequently any 'successful' bid that was based upon changes to legislation may actually fail if the legislation is not passed. Logically then, contract negotiations could not be confidently completed to the satisfaction of either party until required changes to legislation was passed.

3.108 In this discussion at Estimates, Senator Minchin asked the minister:

> What we are putting to you is that there is no way on earth that a final contract can be signed to allow the rollout of the NBN until the proponent and the government know the outcome of the legislative process that you wish to put in place or that is required to be put in place …[77]

Although the minister attempted to remain non-committal throughout the discussion, he did state that:

> …the only reason there would be any uncertainty about the regulatory framework once we have reached an agreement is if your party decided to block it in the chamber.
>
> …let us be clear: we will reach an agreement and we will put forward – depending on the outcome of that [agreement] – any regulatory changes.[78]

3.109 A subsequent question from Senator Birmingham sought further clarification on this, when he asked:

> …does that mean that you intend to negotiate a contract with the successful bidder and put a package of regulatory framework changes on the table in the Australian Senate on a take-it-or-leave-it basis because of that contract you have negotiated?[79]

3.110 The minister then replied:

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77 Senator the Hon. Nick Minchin, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 18.

78 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 18.

79 Senator Simon Birmingham, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 19

> We are not going to be negotiating with your good selves about this once we have reached an agreement with the successful bidder.[80]

3.111 As stated at the commencement of this chapter, the NBN has afforded the government an historic opportunity to correct failures of the current regime. By rushing the legislative process, government would not only severely jeopardise this opportunity, but may also place at risk the validity of any contract signed on the premise of regulatory changes that must face the full scrutiny and approval of parliament.

Conclusion

3.112 The committee encourages the government to effectively utilises this historic opportunity for regulatory change.

Lack of true 'consultation'

3.113 The other area of criticism by many is the consultation process itself. The submission process in the NBN initiative could be described as extensive, with submissions requested by the department on:

- the design of the RFP;
- the design of instruments for the provision of industry information to assist proponents with their bids;
- suggestions for regulatory changes; and
- how to address the provision of services to the remaining two per cent of Australian homes and businesses that may not have access to the NBN.

3.114 Notwithstanding the extent of the submission process, the criticism has been that this process is purely a one-way transfer of information. As it now stands, the government has merely asked for advice from the industry and the general public; it has given no undertaking to comment on that advice or to provide a summary of the advice that the government considers relevant to the ongoing RFP process. The RFP document merely states that:

> The Commonwealth will publish regulatory changes proposed by the successful proponent which have been agreed by the Commonwealth.[81]

3.115 Giving evidence in Brisbane, Dr Kelso drew attention to the lack of opportunity for public consultation:

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80 Senator the Hon. Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, *Estimates Hansard,* Senate Standing Committee on Environment, Communications and the Arts, Canberra, 20 October 2008, p. 19.

81 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.5.41, p. 14.

> The submissions are to be evaluated by the expert panel, and who knows what their conclusion shall be? ... The only time at which there will be public exposure about the regulatory framework will be when parliament resumes next year and presumably changes to the legislation will be sought.[82]

3.116 Dr Kelso went on to compare this process with historical examples of major changes to the telecommunications industry, including the move away from the government monopoly of the Post Master General's Department and the creation of the then government-owned Telecom Australia:

> Until now, all the changes that the telecommunications have undergone … have been supported by significant public disclosure and discussion.[83]

3.117 Vodafone highlights the importance of the structure of the regulatory regime in their submission, making a strong statement that the government should go much further to facilitate and consider industry discussion of all proponents' suggested regulatory changes, not just those of the successful bidder, to inform the final decision making process:

> …the Commonwealth should provide an opportunity for interested parties to review and comment upon the changes to the existing regulatory regime proposed by various proponents, prior to the Expert Panel making its final decision.[84]

3.118 Generally, if the government is to create any new regulatory regime, it would follow that the affected industry, in this case the telecommunications sector, would be afforded the opportunity to review and discuss what the government may be considering and thus the opportunity to provide true input to the regulatory process. However, the RFP suggests that the government may (or may not) discuss with only the successful bidder their proposed regulatory regime before coming to an agreement with them on the changes, which will subsequently be announced to the rest of Australia. It makes no mention of discussing changes that are put forward by all proponents.

3.119 This does not mitigate the claims made earlier in this chapter that the process lacks transparency and accountability. Without allowing two-way consultation, the government could stand accused of merely playing lip-service to the consultation process, albeit via multiple calls for submissions.

Possible legal challenges

3.120 Given that the NBN will become such a significant component of Australia's infrastructure, the stakes are high and competition could be fierce for the right to be

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82 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 18.

83 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 19.

84 Vodafone, *Submission 9,* p. 24.

the provider of this infrastructure. The CCC has taken the criticism of the RFP process one step further, and believes that the department has placed too much emphasis on commercial issues within the process, rather than following 'best practice processes' for the development of the policy and regulation:

> Under the law of the land today, no proposed investment that seeks, through an undertaking to the ACCC, what is in effect a license to operate a monopoly … would ever be negotiated in private. …
>
> Yet the Department has consistently placed its concerns about the commercial aspects of the NBN process above the need to ensure public scrutiny and input to decision-making around the regulatory issues.[85]

3.121 This issue takes on additional importance in the context of the discussion earlier in this chapter regarding the signing of any contract that may be contingent on the passage of as yet undisclosed regulatory changes. The cancellation of a contract due to the failure of legislation could provide additional grounds for a legal challenge.

3.122 The CCC submission highlights further flaws in the process, noting that:

> …the Department appears to have given some participants in the RFP process the impression that they are constrained in what they can provide by way of response to the call for regulatory submissions. This raises serious risk of legal challenge.[86]

3.123 The CCC submits that the NBN will impact on the business of every current Australian fixed-line communication company, and that as such:

> …the likelihood of legal challenges against any decision are high.[87]

Conclusion

3.124 The committee believes that it is in the interest of the government, the industry and the Australian people to ensure that delays to the timeframe for implementation of the NBN are kept to a minimum. Notwithstanding this, the committee considers that the government should incorporate appropriate and timely opportunities for consultation with the industry on suggested regulatory changes.

3.125 The committee also believes that the government could easily remove several avenues of possible legal challenge by incorporating industry consultation into the process, even at this late stage.

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85 CCC, *Submission 8*, 'Submission in Response to the Minister's Invitation for Comments on Telecommunications Regulation', p. 20.

86 CCC, *Submission 8*, 'Submission in Response to the Minister's Invitation for Comments on Telecommunications Regulation', p. 21.

87 CCC, *Submission 8*, 'Submission in Response to the Minister's Invitation for Comments on Telecommunications Regulation', p. 21.

Chapter 4

Deployment

Introduction

4.1 Discussions in chapter 2 touched on the fact that the government has been non-prescriptive in how the $4.7 billion will be allocated once the successful bidder is announced. It has also been discussed that the government has stated that the Request for Proposals (RFP) was specifically non-prescriptive to facilitate optimal flexibility in the network design by prospective bidders. Also described previously is the particular concern expressed to this committee that, given the significant commitment of taxpayers' money, the government must ensure that those public monies provide maximum benefit to ***all*** taxpayers throughout Australia.

4.2 The RFP states that the footprint of the National Broadband Network (NBN) is to cover 98 per cent of Australian homes and business premises. Chapter 2 has also discussed the fact that the government has again been non-prescriptive as to how it will measure the ability of each bidder to meet that objective, and also in the geographic location of the 98 per cent footprint. There is great concern that not requiring proponents to cover a stated geographic area will allow bidders to select the areas that would prove most commercially viable for them, which automatically de-selects remote areas and black spots that are currently underserved or receive no broadband service at all.

4.3 Real concerns regarding the 98 per cent footprint have been expressed right across the industry, by state governments and by individuals alike. The most logical assumption is that the 98 per cent will be measured purely on the basis of population density. It is subsequently apparent that those states with large geographic areas and sparse populations will be most disadvantaged, despite the fact that many of those remote areas generate significant economic activity and wealth for Australia. As stated by the Western Australia Chamber of Commerce and Industry:

> CCI is concerned that the NBN will have limited coverage in Western Australia based on the Commonwealth's target to cover 98 percent of the Australian population and WA's large land mass and sparse population.[1]

4.4 The Queensland Government calls on the Commonwealth to undertake a consultative approach with all states and territories in order to determine where the footprint will lie:

> A key issue for Queensland is the 2% of Australian homes and businesses that will not receive access to the NBN. … [I]t is considered that use of a

1 Western Australia Chamber of Commerce and Industry, *Submission 17*, p. 5.

> national statistic could adversely impact states, such as Queensland, that have a more dispersed population.
>
> The Australian Government must collaborate with the states to agree on the location of homes and businesses that will benefit from the NBN. …
>
> …the Queensland Government does not wish the NBN 98% threshold to be allocated in Queensland purely on a population density basis.[2]

4.5 When giving evidence at the Perth public hearing, the Western Australia Department of Industry and Resources (WA DOIR) expressed concern that although Western Australia (WA) was approximately one third of Australia's total area, because WA's population was only 10 per cent of the nation's population, theoretically a bid could exclude all underserved areas of WA and still fulfil the RFP requirement of reaching 98 per cent of homes and businesses:

> …there is no clear definition of 'NBN' [footprint]. The NBN has a target of 98 per cent of the Australian population, of which WA consists of approximately 10 per cent … living in one-third of the geographic area of Australia. Our perception of the NBN is that it covers only areas where there is high potential for revenue and where there are existing broadband services already. WA's under-serviced area risks becoming the two per cent casualty of the NBN.[3]

4.6 If the government were to base the footprint on population densities, given that the timeframe for reaching the 98 per cent is five years, this translates to those people in regional and remote areas that are already disadvantaged having to wait another five years or more (depending on the contract signing date) before they can access the NBN. Vodafone draws the conclusion that:

> The government's investment should be directed solely to the roll out of broadband networks in areas where it would not otherwise be economic to do so …[4]

4.7 These comments necessitate an examination of how the NBN will be deployed; however, again this critical factor has not been outlined in the RFP, but left up to each potential bidder to determine, leaving the nation virtually in the dark on this issue until after the contract is signed.

Roll-in rather than roll-out

4.8 The discussion of this issue led a number of submitters and witnesses to request that the government consider carefully its deployment schedule for the NBN.

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2 Queensland Government, *Submission to the Australian Government on Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas*, pp 4 and 6.

3 Mr Anson Cheng, Manager, Broadband Infrastructure, Western Australia Department of Industry and Resources (WA DOIR), *Committee Hansard*, Perth, 6 November 2008, p. 2.

4 Vodafone, *Submission 9*, p. 8.

4.9 One of the major players in the RFP process is Terria, which has stated a preference for how they believe the NBN should be deployed; it is assumed that this will be reflected in their proposal to the government:

> The NBN provides an opportunity to schedule the deployment of the new infrastructure in such a way that those consumers currently without broadband, are the focus for the initial deployment. …
>
> 'Rolling-in' the NBN starting with currently under-serviced areas will clearly reduce the gap between the broadband 'haves' and 'have-nots'. … Areas currently suffering a complete absence of service or from the presence of 'black spots' would receive early attention under a 'roll-in' approach.[5]

4.10 Digital Tasmania identified the schedule for deployment as one of their key issues in their submission, commenting it is necessary to ensure that:

> Historically underserved regional and rural areas, including Tasmania are some of the first to receive the benefits of an NBN rollout.[6]

4.11 In Sydney the committee heard from Mr Hicks of Adam Internet, who stated his concern on the issue from a South Australian perspective:

> I find it a little strange that we are looking at disadvantaging quite a large segment of South Australia when that money could be used to roll forward, so to speak, from the country back to Adelaide. … That then puts broadband where it is needed the most, and that is to the people who do not have it.[7]

4.12 As one of Australia's largest Internet Service Providers (ISPs), iiNet restates that those areas currently underserved should be the first to benefit from the government funding:

> An 'outside-in' deployment of service [should be implemented] starting with areas and customers currently without service. This includes non-metropolitan customers as well as that in 'broadband black-spots'.[8]

4.13 At the Brisbane hearing, a witness for Indigenous Remote Communications Australia (IRCA) also advocated that the deployment should be rolled-in:

> Definitely start in the remote areas. You could have maximum impact on the failed state of remote Australia if you were able to roll out broadband to those areas.[9]

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5 Terria, *Submission 12*, p. 8.

6 Digital Tasmania, *Submission 18*, p. 3.

7 Mr Gregory Hicks, Chairman of the Adelaide ISP, Adam Internet, *Committee Hansard*, Sydney, 7 October 2008, p. 42.

8 iiNet, *Submission 3*, 'Regulatory Submission On the requirements for an Open Access National Broadband Network', June 2008, p. 6.

4.14 Another Brisbane witness from the Torres Shire Council gave their unequivocal backing to the concept of rolling-in the NBN from remote areas such as their shire:

> Yes, I would back that 150 per cent … especially here in the Torres Strait…[10]

4.15 Mayor Stephen went on to explain that many people living in the shire, and also entering the shire from international waters, use their mobile telephone to access the internet as their lifeline when they are travelling to the shire by sea. However, mobile service is very unreliable in the shire. Mayor Stephen elaborated on an emergency situation that occurred earlier in the year that illustrated his point:

> In terms of getting a response from the emergency services … out to the community which is only about 170 nautical miles north of Thursday Island, it took over 48 hours to actually respond to that [emergency]. … [B]ecause the mobile phone system was actually down they could not get any contact whether by land line or a message back to Thursday Island…. It gives constituents a false understanding because they just jump in their tinnies and expect to actually have access by the internet.[11]

4.16 The weight of evidence is increased by comments from Primus Telecom, which also calls for the government to roll-in rather than roll-out the NBN:

> Any deployment should initially be prioritised to target areas that do not achieve these speeds [12 Mbps]. … Broadband poor areas should be rectified ahead of everything else, and this must be one of the key objectives and considerations of the NBN.[12]

4.17 Another telco, AAPT made identical comments in their submission as they discussed their suggestions for a possible transition path for the NBN:

> AAPT submits that the construct of the NBN should be to firstly provide services to currently under-served areas. That is, the network should be constructed on the basis of 'rolling-in' infrastructure from areas with low speed broadband towards areas which currently have higher speed broadband. …
>
> Such a roll-in will best serve the interests of consumers who are most disadvantaged with respect to access to higher speed broadband …[13]

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9 Ms Linda Chellew, Manager, Indigenous Remote Communications Australia (IRCA), *Committee Hansard*, Brisbane, 21 November 2008, p. 6.

10 Councillor Pedro Stephen, Mayor, Torres Shire Council, *Committee Hansard*, Brisbane, 21 November 2008, p. 14.

11 Councillor Stephen, *Committee Hansard* Brisbane, 21 November 2008, p. 15.

12 Primus Telecom, *Submission 20*, pp 7-8.

13 AAPT, *Submission 4*, p. 7.

4.18 In their evidence to the committee, WA DOIR acknowledges the RFP requirement for proponents to show a return on their investment, and makes the logical conclusion that business cases will be focused on areas that display greatest commercial viability.[14] This theme was also picked up by other submitters including AUSTAR, who further explained their views at the Sydney public hearing:

> …the RFP did not dictate one way or the other [whether it would be rolled] in or out. So somebody is preparing a business case and putting forward a tender on the basis that, to roll their funding through, they want to start generating the revenues and taking those revenues to help fund the push-out.[15]

4.19 Ms Weir continued that this would be a logical and legitimate business decision and make for a sound business model on which to base a proposal; however because the government did not specify the deployment schedule, no-one will know, including the government, on which deployment model proponents have based their bids until the successful bidder is selected and contract details announced.

4.20 In her evidence at the Sydney hearing, Ms Teresa Corbin said that the government funding should not only be targeted on underserviced geographic areas, but also on underserviced groups within the community:

> …we do have the opinion that the underserviced areas, as far as both specific customer groups and geographic location are concerned, have to be targeted with government funding to ensure that they do get the services.[16]

4.21 Later in her evidence Ms Corbin reiterated the need to ensure that the NBN is deployed to remote areas first:

> I cannot urge strongly enough that some of those remote and regional areas that are not getting internet at the moment are the ones that should be prioritised. They should not have to wait five years, because they already do not have access.[17]

4.22 Although the government has stated that the two per cent of Australians not covered by the NBN would be assisted in gaining access through the Australian Broadband Guarantee (ABG), a number of people have commented that previous funding efforts of successive governments, including the ABG, have not provided consistent or sustainable results:

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14 Mr Cheng, WA DOIR, *Committee Hansard*, Perth, 6 November 2008, p. 2.

15 Ms Deanne Weir, Group Director, Corporate Development and Legal Affairs, AUSTAR United Communications, *Committee Hansard,* Sydney, 7 October 2008, p. 18.

16 Ms Corbin, Consumers Telecommunications Network, *Committee Hansard,* Sydney, 7 October 2008, p. 73.

17 Ms Corbin, Consumers Telecommunications Network, *Committee Hansard,* Sydney, 7 October 2008, p. 76.

> It is important to understand that rural and remote end users have seen a number of Funding Programs start, stop and change over the last few years. **Whatever solution is developed … needs to be long-term, sustainable and relevant to rural and remote areas**.[18][bolding copied]

4.23 South Australia (SA) provided a detailed submission to the Regional Telecommunications Review, commenting on the adequacy of existing funding programs to facilitate services for rural and remote areas of the state. The submission notes that while subsidies such as those provided under the ABG are welcome, the programs do not necessarily meet community needs:

> The Australian Broadband Guarantee program while welcome is overly restrictive and complicated and saddled with the same inherent flaws (such as shirt term homes being ineligible) as earlier subsidy programs.[19]

4.24 The submission summarises issues faced by SA's remote Indigenous communities, explaining the reasons why there is still a lack of access to computers and limited capacity to use digital technology, due in part to the lack of continuity of previous funding programs:

> Aboriginal communities require programs which identify and empower community champions, and provide on-going funding …[20]

4.25 At the Brisbane hearing, evidence was heard from representatives of Electronic Frontiers Australia (EFA) on the issue of how the $4.7 billion should be allocated:

> Certainly $4.7 billion could do a lot to help internet access in rural and remote areas that genuinely do need it. Perhaps it could be targeted at them rather than a one-size-fits-all approach.[21]

4.26 The committee therefore considers that, rather than the government relying on ad hoc funding programs to prop up the provision of what is now seen as an essential service, a more effective solution would be to ensure that the deployment of the NBN is mandated from the underserved areas as the first priority. This translates to the infrastructure being rolled-***IN*** from those areas currently underserved or unserved, with areas with current access having the broadband infrastructure deployed last.

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18 Australian Telecommunications Users Group, *Submission 7*, p. 4.

19 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, Attachment 1, p. 8.

20 South Australian Government, *Submission to the Regional Telecommunications Independent Review Committee (RTIRC)*, December 2008, Attachment 1, p. 11.

21 Mr Dale Clapperton, Spokesperson, Electronic Frontiers Australia, *Committee Hansard*, Brisbane, 21 November 2008, p. 37.

Technology to be deployed

4.27 One issue that the government has been prescriptive on within the RFP document is the technology on which the network should be based. Objective five within the RFP states that the National Broadband Network should 'use[s] fibre-to-the-node or fibre-to-the-premises network architecture'.[22]

4.28 The committee has heard from a number of people that this is one area where proponents *should* have been given greater flexibility. Professor Joshua Gans asks the question, 'Should we be relying on fibre?' He answers his own question by stating that 'This strikes me as too restrictive a prescription'.[23]

4.29 Professor Gans continues by discussing the four main technology platforms currently available for the provision of the NBN, being copper, cable, wireless and fibre. However, noting that wireless speed capabilities are generally in excess of those attainable using fibre, Professor Gans acknowledges that wireless has limitations. Although fibre may be technologically superior to wireless, Professor Gans comments that '…given the savings in the cost of a new roll-out, they can be economically superior to fibre'.[24]

4.30 The increasing convergence of the technology platforms is then highlighted, noting that the implications for the NBN build are that it must enable the interoperability of these platforms. This seems to imply that, due to the newness of this convergence, and of fibre itself, the potentials have yet to be fully explored, and consequently '…by being prescriptive, we deny ourselves the possibility of finding out'.[25]

4.31 At the public hearing in Sydney, the criticism of the RFP being too technology-prescriptive was echoed by Mr Gregory Hicks from Adam Internet, when he stated that:

> We should be looking at fibre to the home … Most of the world is doing that. We are looking at a stopgap … when in fact we should be looking at something like fibre to the home from day one...[26]

4.32 At the Brisbane hearing, Dr Kelso highlighted the concerns expressed in his submission, stating that, if not carefully engineered to be upgradeable to fibre-to-the-premises (FTTP), it would be a backward step for Australia:

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22 DBCDE, *Request for Proposals to Roll-out and Operate a National Broadband Network for Australia*, 11 April 2008, paragraph 1.3.1.5, p. 5.

23 Professor Joshua Gans, *Submission 15*, p. 2.

24 Professor Joshua Gans, *Submission 15*, p. 2.

25 *Submission 15*, p. 2.

26 Mr Hicks, Adam Internet, *Committee Hansard*, Sydney, 7 October 2008, p. 48.

> I am particularly concerned about the prescription of fibre-to-the-node technology for the national broadband network. I believe that, if it is to be prescribed as fibre to the node and nothing more, it is a retrograde step. … if we move down the path of the network being engineered for fibre to the node where it makes it difficult for it to go beyond that to fibre to the home, it is a retrograde step.[27]

4.33 Dr Kelso went on to explain that it is not the actual fibre that is the limiting factor, as fibre has no limitations on bandwidth capacity, rather '…the technology in the nodal point and the copper pairs that run from there are potentially a bottleneck'.[28]

4.34 According to Dr Kelso if we continue down this path and the government does not address this new potential bottleneck, the Australian telecommunications industry will be in a very similar position in ten years' time to the one it finds itself in today.

4.35 Another advocate for not prescribing the technology for the NBN was Mr Paul Budde, although his comments were also directed at the requirement of reaching 98 per cent of Australian homes and businesses. Mr Budde states that it is quite feasible to attempt a footprint of 91-93 per cent when building a fibre-to-the-node (FTTN) network, however to attempt reaching 98 per cent 'is silly':

> The government should not fall into the trap of legislating technology. … The government should legislate the outcomes, not the technology you do it with.[29]

4.36 A notable comment on the technology prescription was from the Electronic Frontiers Australia submission. Their concluding paragraph discussed the likely pricing structure that would result from a FTTN build, stating that many customers who already access high speed broadband may well be worse off under the NBN, or be unable to afford the higher speeds. Their submission subsequently concluded that 'The benefits of a FTTN network do not, in our view, outweigh the costs, and a FTTN network should not proceed for that reason'.[30]

4.37 iiNet also stated that they do not believe the current proposal should go ahead. In their evidence at the Perth hearing, they commented on this several times, for example, '…no, I do not believe that the proposed NBN solution is the right solution for Australia. That is my honest opinion'.[31]

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27 Dr Ross Kelso, *Committee Hansard,* Brisbane, 21 November 2008, pp 20-21.

28 Dr Kelso, *Committee Hansard,* Brisbane, 21 November 2008, p. 21.

29 Mr Paul Budde, Paul Budde Communication, *Committee Hansard,* Sydney, 7 October 2008, p. 84.

30 Electronic Frontiers Australia, *Submission 23*, p. 4.

31 Mr Michael Malone, Managing Director, iiNet, *Committee Hansard,* Perth, 6 November 2008, p. 25.

4.38 iiNet also provided an alternative view point in their submission with an attachment titled 'The Myth of Fibre'. After completing studies of their own customers in a number of urban areas they have concluded that 'The immediate need for an FTTN network is a myth'.[32]

4.39 Their research shows that iiNet customers are routinely accessing 6 Mbps every day on their network, which uses the existing copper network and the DSLAMs[33] installed by iiNet at the local exchanges. iiNet also states that these speeds are obtainable at distances greater than 1.5 km from the exchanges:

> These customers are not connected over a fibre network, nor are they located within 1.5km from the telephone exchange. Rather they are connecting via the copper Customer Access Network (CAN) that has been used on an 'as is' basis … just customers using plug and play components and iiNet ADSL.[34]

4.40 However, there is a known quality factor with the copper network, and in particular the CAN areas that have aging copper infrastructure. 'The major point with the quality of speed is the loss of signal over distance, which is exacerbated by poor-quality copper.'[35]

4.41 In addition, the existence of pair-gain copper wiring is another inhibitor of access to broadband if the existing copper were to be relied upon, even for a short period. However, iiNet's research has illustrated that existing CANs could be utilised in the short term while a 'better' solution for the NBN was devised.

4.42 The committee heard from Mr Arthur Price, the Chairman of Axia NetMedia, which has revealed itself as a proponent for the NBN. Axia has deployed fibre networks in Alberta, Canada, as well as in France, and is part of the consortium that will deploy the new fibre network in Singapore. Axia NetMedia has also revealed itself as a proponent for the NBN.

4.43 Mr Price stated that fibre is definitely the best option for any new network, qualifying this statement by adding that the fibre needs to be high quality to support all that Next Generation services would demand of it:

> The best modern topography is a fibre based network. If you create a fibre based grid and put on that fibre based grid only IP layer compatible technology … and use digital technology, then you have a network that can haul digital traffic of any kind for any purpose … in any direction in real time.[36]

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32 iiNet, *Submission 3*, 'The Myth of Fibre', p. 15.

33 Digital Subscriber Line Access Multiplexer (DSLAM)

34 *Submission 3*, 'The Myth of Fibre', p. 4.

35 Mr Malone, iiNet, *Committee Hansard*, Perth, 6 November 2008, p. 20.

36 Mr Price, Axia NetMedia, *Committee Hansard*, Canberra, 24 November 2008, p. 2.

4.44 Mr Price went on to state that 'Of course, fibre is best because it has no complications; it just has a high fixed cost.'[37]

4.45 Most submissions and witnesses have agreed that the greatest cost in creating the NBN will be in the deployment of the fibre backhaul. However, Mr Price later qualified his reference to high cost when he was questioned about the huge distances that would need to be covered in Australia:

> You can extend fibre way more than people think: it is not as costly a technology as people think.[38] …
>
> I would say [huge distance] is probably not near a big a challenge as you think.[39]

4.46 Mr Price did seem to agree with the EFA, who had stated that FTTN was not the most ideal solution. In commenting on the method of deployment that Axia have used in all three networks, Mr Price said that their objective was to create what he called a fibre 'community interconnect grid':

> The community interconnect grid connects every community in Alberta to the global gateways in Calgary and Edmonton. …
>
> If you do these kind of community interconnect networks, then the community internet fibre grid can level the playing field on distance and distance dislocation.[40]

4.47 Although agreeing that fibre was the best technology to use, Mr Price did specify that Axia had not deployed an FTTN solution:

> The reason fibre to the node is not on [Axia's] list is it is simply not a functional alternative. From a competitive landscape point of view, it is not a functional alternative. The only person fibre to node works for is the guy that owns the local loop and the guy that owns the backhaul. … The reason they have [FTTN] is because they have got a lot of money hanging on those copper loops. … Since it has such poor performance, the way to defend it is to get fibre closer to the premise so the copper loop is not as poor performing. But it only works for the incumbent.[41]

Do we need a <u>national</u> solution?

4.48 Another prescriptive factor is within the very name of the NBN, which dictates that the government is calling for a *national* network. Many submissions

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37 Mr Price, Axia NetMedia, *Committee Hansard,* Canberra, 24 November 2008, p. 13.

38 Mr Price, Axia NetMedia, *Committee Hansard,* Canberra, 24 November 2008, p.13.

39 Mr Price, Axia NetMedia, *Committee Hansard,* Canberra, 24 November 2008, p. 14.

40 Mr Price, Axia NetMedia, *Committee Hansard,* Canberra, 24 November 2008, p. 4.

41 Mr Price, Axia NetMedia, *Committee Hansard,* Canberra, 24 November 2008, pp 16-17.

were based on the assumption that, because the NBN has the word 'national' in the title, this necessarily requires that there must be only one network provider.

4.49 Professor Gans from Melbourne examined the term 'national', and provided his own interpretation. Professor Gans highlights that there is no such requirement within the RFP, which specifically allows for bidders to propose a state-based solution. However, he does query why the economic unit used by the government was 'state' rather than allow, for example, a local area solution.

4.50 In his submission, Professor Gans referred to a 2006 report he wrote, in which he argues that:

> …local areas have particular needs for which tailoring might be desirable. They also have different cost structures in deploying new technologies. All this might warrant a more disaggregated approach …[42]

4.51 The question is also raised in Professor Gans' submission as to whether high speed broadband is actually needed by 98 per cent of Australian homes and businesses. Comment has already been noted that many people only use the internet for email, which does not require high speed broadband. Professor Gans notes also that, because some businesses or even individuals may require high speed broadband, this does not translate to requiring the availability of that high speed capacity for every location nationally.[43]

4.52 Given the vastness and diversity of the Australian landscape, and the sparse distribution and diverse needs of Australia's population, the committee heard that a one-size-fits-all approach will not provide an optimal solution:

> Given the vast density and topographical differences between metropolitan and regional Australia, adopting a single, national technology approach is not the most effective solution and is unlikely to be sustainable over the longer term. It is critical that regional Australia has access to metro equivalent services and prices … [a]nd these services should be provided with fit-for-purpose network solutions …[44]

4.53 When giving evidence at the Canberra hearing, Mr Price explained that his company, Axia NetMedia, strives to push the fibre out as close as possible to the premises, but uses wireless where deployment of fibre is impractical, also stressing the need for wireless to be of high quality:

> The only wireless links in Alberta are carrier grade wireless … It is microwave wireless and is typically where you actually could not implement fibre for some geographical reason.[45]

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42 Professor Joshua Gans, *Submission 15*, p. 1.

43 *Submission 15*, p. 1.

44 AUSTAR United Telecommunications, *Submission 16*, p. 9.

45 Mr Price, Axia NetMedia, *Committee Hansard*, Canberra, 24 November 2008. p. 13.

4.54 This comment aligns with Professor Gans' call for there to be local solutions that will enable convergence of technologies. Mr Price also seems to intimate Axia's preference for fibre-to-the-premises wherever possible, which is the solution they will deploy in Singapore.

Conclusion

4.55 The committee believes that the requirement in the RFP for the NBN design to be based on a FTTN or FTTP platform should be broadened to enable a greater level of technology convergence where this is more appropriate than fibre.

Planning for transition

4.56 The prospect of compulsorily moving all Australians, including domestic, government and business customers, from the current technologies to a mandated new technological platform is a daunting concept and will require detailed and considered planning. Suggestions have been made for the government to carefully consider suggested migration plans, although the committee acknowledges that any transition plan will be very dependent on the nature of the roll-out (or roll-in), the technology platform to be utilised and whether the solution incorporates state-based proposals.

4.57 The committee heard a number of times concerns from existing service providers regarding the prospect of having their assets 'stranded' at the local exchange. These companies have made significant investment in their own DSLAM infrastructure, which has been housed in the local exchanges that are owned by Telstra. The nature of a FTTN solution would see fibre bypassing the exchange and extending directly to the nodes, which will apparently number in the tens of thousands, with the customer access network connecting directly to the fibre in the local node. As there will no longer be a need for these DSLAMS, which will consequently become 'stranded assets', the issue of compensation also arises for those companies who have made those outlays. There is also a possibility of customers being stranded without access to any services.

4.58 The answers lie in a thoughtful transition plan, regardless of the technology platforms used or the reach of the solution. Adam Internet is one such organisation that stands to have their significant assets stranded at the exchange, but has made suggestions for how to minimise the impact. This would particularly be the case if there was no transition, but rather an overnight 'cutover' to the new network.

4.59 At the hearing in Sydney, Mr Gregory Hicks from Adam Internet stated his concerns due to the way Telstra currently mishandles the migration of his customers when Adam Internet gains access to a new exchange:

> We cannot even do a single exchange correctly, let alone the whole of Australia, so logically that says that it would be a fairly slow and long procedure to have people migrate from their existing infrastructures.[46]

4.60 He adds that there is not just the technology to consider, there is a human factor to consider also, which can be at times less predictable and/or reliable:

> …there are an awful lot of customers who have to have their database physically changed and their records moved. There is a hard wire. There is human intervention. Every time somebody changes one of those, you end up with the possibility of standing customers as well. … [T]here needs to be an organised migration path over a four- or five-year period.[47]

4.61 Mr Hicks also believed that there should be a 'no disadvantage test' in the migration plan, which should also include a no-change option. This would allow customers who can currently access speeds of greater than 12 Mbps at prices that may be lower than the NBN prices to remain with their current service provider for the extent of the transition or migration period. He continued that:

> …there would have to be a migration period, so that we all agree that, whether [the migration period] is five years or seven years, everyone will be on the new network in, say seven years time. The option of changing is up to the customer at any time in that seven years. … It would be a managed migration.[48]

4.62 It logically follows that if there is a managed migration or transition plan over a number of years, companies with stranded assets could use that period to gradually depreciate those assets and retire them in a commercially viable manner, thus removing any need for compensation payments.

4.63 iiNet has also specified their belief that a migration plan is required, stating that 'Transitional arrangements are essential and should be aimed at meeting public policy objectives rather than shoring up anti-competitive structures.[49]

4.64 iiNet prefers that there is a provision for compensation of any stranded assets, not just for service providers but also for customers. 'A managed migration away from stranded assets must be available. Stranding must not be at the whim of the network operator or owner.'[50]

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46 Mr Hicks, Adam Internet, *Committee Hansard,* Sydney, 7 October 2008, p. 44.

47 Mr Hicks, Adam Internet, *Committee Hansard,* Sydney, 7 October 2008, pp 44-45.

48 Mr Hicks, Adam Internet, *Committee Hansard,* Sydney, 7 October 2008, p. 45.

49 iiNet, *Submission 3*, 'Regulatory Submission On the requirements for an Open Access National Broadband Network', June 2008, p. 6.

50 iiNet, *Submission 3*, 'Regulatory Submission On the requirements for an Open Access National Broadband Network', June 2008, p. 14.

4.65 Other principles that iiNet would like incorporated into a transition plan include a 'no disadvantage test', and that migration to an NBN should not be enforced prior to five years from the commencement of the NBN in a given area.

4.66 Dr Kelso discussed the issue of stranded assets from a slightly different perspective at the Brisbane hearing, stating that:

> …if we have a true open access regime through fibre to the node or preferrably fibre to the home, the matter of stranded assets should not be an issue. … [I]f you have true open access, there really are no stranded assets, because those competitors can then simply move into the new regime.[51]

4.67 Dr Kelso went on to explain that, even if the new regime was not truly open access in nature, and assets were stranded at the exchange, he believed that the majority of these assets would have already been 'written off' in taxation terms:

> Typically, this gear has an economic life of only 18 months or so; so they may or may not agree with that. … in tax terms, it is typically written off.[52]

Improved planning and building coordination across jurisdictions

4.68 A critical issue raised with the committee in relation to the transition planning was to ensure that there was a greater degree of coordination and cooperation between the three tiers of government, and also between all tiers of government and private enterprises. In discussing examples of where better coordination had delivered improved outcomes for the community, Mr Anson Cheng of the WA DIOR stated that:

> There is a need for effective coordination between communities, government and industry to ensure that efficient and effective sustainable service delivery mechanisms are established. There is also a need for a high level of commitment and coordination across all levels of government.[53]

4.69 In fact, several Perth witnesses raised the issue of allowing greater involvement and coordination of local, state and Commonwealth governments in the planning and deployment of the NBN. This may well be due to the vast land area of WA, and perhaps also due to the surge in building and infrastructure growth during the recent years of economic growth following the mining and resource boom in the state. Mr Frontino, the Managing Director of the private company, CipherTel, made the following observation:

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51 Dr Kelso, *Committee Hansard*, Brisbane, 21 November 2008, pp 27-28.

52 Dr Kelso, *Committee Hansard*, Brisbane, 21 November 2008, p. 28.

53 Mr Cheng, *Committee Hansard*, Perth, 6 November 2008, p. 2.

> I think it is important that local government does get involved, that town planning or planning infrastructure gets involved, and that the infrastructure for these services is planned for well in advance, before the roads go down and before the bridges are built. … It could hugely minimise the cost to put fibre in at this point of time versus putting it in two years down the track when the price could be 10 to 15 times higher.[54]

4.70 Mr Peter Monks, Chief Executive Officer of the Perth City Council, also drew attention to the need for coordinated planning as one of four key issues in the deployment of the NBN:

> The fourth and final point essentially is to improve the way that telecommunications infrastructure is rolled out. This last point could easily be forgotten when dealing with the higher level technological components of any new network. However, local governments throughout Australia, and especially within capital cities, have had many frustrations with telecommunication companies installing their infrastructure over many years.[55]

4.71 Mr Monks provided photographic examples of where multiple pit lid covers provide a patch-worked footpath, adding that, 'Some parts of the city streets in Perth contain more pit lid covers than paving slabs.'[56] These covers are ad hoc in design, do not comply with local specifications; in addition street trees are being killed by cabling work, subsequently cannot be removed because of that cabling work, and for similar reasons, new trees cannot be planted. As the underlying cause for this mayhem of the streetscape, Mr Monks explained that 'The Telecommunications Act exempts much of these works as being minor works,' later adding that 'if [any structure] is lower than 600 millimetres, you could get away without a planning approval.'[57]

4.72 Professor Trevor Green spoke at length about the need for improved coordination of infrastructure planning and in particular the economic efficiencies that this coordination can deliver:

> …there is a severe lack of state planning or local government planning in how and where telecom networks should look. We have … new residential estates in Perth that are being built. They are not putting in the conduits and the pipes and the infrastructure to have fibre to the home, simply because the backhaul from that estate [to Perth] does not exist. …

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54 Mr Anthony Frontino, Managing Director, CipherTel, *Committee Hansard*, Perth, 6 November 2008, p. 72.

55 Mr Peter Monk, Chief Executive Officer, City of Perth, *Committee Hansard*, Perth, 6 November 2008, p. 75.

56 Mr Monk, *Committee Hansard*, Perth, 6 November 2008, p. 75.

57 Mr Monk, *Committee Hansard*, Perth, 6 November 2008, p. 79.

> State and Federal governments should in fact be mandating, for new estates or greenfield estates, that provision for the fibre infrastructure should be made.[58]

4.73 Professor Green then described the recently completed Perth to Mandurah rail line as an example of where improved coordination has provided immediate improvement in outcomes:

> …where state planning has … been lucky is in terms of the Perth to Mandurah railway line. … I … proposed … or motivated to get the conduit next to that railway line. Putting the fibre in there is having an impact on broadband …[59]

4.74 The committee proceeded to ask Professor Green what would currently prohibit local governments or state governments from requiring that land developers install appropriate telecommunications infrastructure. Professor Green's response indicates that what is required is a change of attitude by governments, which is underpinned by a change in legislation:

> They have been very well trained, educated and browbeaten into believing that telecommunications is not their part of the infrastructure provisions, that it is the responsibility of the carriers only. … I have an ongoing battle with the shires [to] say, 'No, you can do it,' but, every time, they get told by the state planning authority, 'No, it's not part of the core planning.' This is where I believe the federal government and certainly the state governments should in fact be putting it out that telecommunications, along with roads, the electricity, the sewerage … are now part of the infrastructure that needs to be provided with a plot. At the moment, telecommunications is not within the act … We need to get the state governments to actually put in the act that, for any new properties that get developed, provision of telecommunications infrastructure needs to be in place.[60]

4.75 Professor Green extended this view to also call for each state to have a telecommunications plan that identifies future development areas, their infrastructure requirements, and include as a minimum the laying of conduits for fibre deployment to that development, and for there to be 'some kind of regulatory and legal support'[61] to ensure it occurs:

> The attitude that telecommunications legislation or telecommunications is only a federal issue needs to be changed … The federal government is not there to do the local state planning.[62]

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58 Professor Trevor Green, *Committee Hansard*, Perth, 6 November 2008, pp. 55-56.

59 Professor Green, *Committee Hansard*, Perth, 6 November 2008, p. 56.

60 Professor Green, *Committee Hansard*, Perth, 6 November 2008, p. 58.

61 Professor Green, *Committee Hansard*, Perth, 6 November 2008, p. 58.

62 Professor Green, *Committee Hansard*, Perth, 6 November 2008, p. 58.

Conclusion

4.76 The committee acknowledges the complexity of the deployment of the NBN. However, the committee concludes that the most effective use of this substantial expenditure would be to ensure that those Australian homes and businesses that are currently most disadvantaged should be prioritised for initial deployment of the NBN. That is, areas that are currently underserved or unserved should have broadband deployed first, with infrastructure subsequently rolled-***IN*** towards the cities from those underserved areas, which are generally in regional, rural and remote communities.

4.77 The committee concludes that the best model for planning the deployment schedule would incorporate high levels of coordination and ongoing involvement by local and state governments with the Commonwealth Government. This would also provide assurance of support through appropriate regulatory changes within each tier of government.

4.78 The committee also concludes that there needs to be a carefully considered transition plan to migrate both existing service providers and their customers to the new network over the five year period specified in the RFP. The aim of this transition would be to ensure that it occurs seamlessly, with a no disadvantage test over the five years and that it minimises the issue of stranded assets and stranded customers.

Closing remarks

4.79 The committee has endeavoured to provide a condensed synopsis of issues that it believes are critical to the decision-making process that will be undertaken over the coming eight week period by the ACCC, the Expert Panel, the department and ultimately the minister. Consequently the committee particularly draws the attention of those decision-makers to the list of conclusions made within the report, which can be found on page xix.

4.80 The final report by this committee, to be tabled on 30 March 2009, will examine the remaining terms of reference in more detail.

Senator Mary Jo Fisher

Chair

Date: December 2008

Dissenting Report by Government Senators

The Importance of Broadband

1.1 Labor Senators note that the Committee heard over and over from witnesses about the importance of Broadband infrastructure for Australia's long-term economic prosperity. It is clear from the evidence of witnesses that broadband is a critical enabling technology. It will underpin and enhance Australia's future prosperity and the living standards of all Australians.

1.2 The Majority Report argues that the Government should have commissioned a theoretical cost-benefit analysis before it embarked on this project to meet our election commitment.

1.3 Among the multitude of reports that seek to calculate the economic impact of broadband, there is a consistent 'bottom line' result – that broadband will deliver significant economic and social benefits to Australia.

1.4 Broadband will be critical for consumers. It will change and improve the way they interact in the Digital Economy, including with the use of IPTV, transferring large amounts of information quickly and enjoying cheap phone calls through Voice over IP. Over time, the need for high speed broadband to satisfy the demands of consumers will become greater and greater.

1.5 Broadband is also of critical importance to businesses, as noted in the Report in Clause 2.12. This sentiment has been echoed by Heather Ridout, CEO of the Australian Industry Group who has made it clear that the time for debate about whether Australia actually needed broadband was over. Ms Ridout has made it clear that:

> The idea that it could be deferred, delayed, argued about again is not warranted.

Ms Ridout further noted that any political party that did not understand the need for the NBN should:

> …get themselves into the 21st century.

1.6 By improving the efficiency of infrastructure utilisation, service delivery and transportation, it is also generally accepted that broadband can help reduce carbon emissions. In fact, a recent study commissioned by Telstra and undertaken by independent climate change analyst, Climate Risk; *Towards a High-Bandwidth, Low-Carbon Future: Telecommunications-based Opportunities to Reduce Greenhouse Gas Emissions*, found that:

> Telecommunications networks can help reduce Australia's greenhouse gas emissions by almost five per cent by 2015 and deliver up to $6.6 billion a year in financial savings for Australian businesses and households.

1.7 As noted on the Government's Digital Education Revolution website:

> Access to reliable, affordable, high speed broadband connections will strengthen the capacity of students, parents, teachers and the wider community to communicate, collaborate and access resources across system, State/Territory and national boundaries.[1]

1.8 High speed broadband will also enable e-health applications such as remote monitoring and consultations to become a reality. As noted on the National E-health transition authority:

> Electronic health information (or e-health) systems that can securely and efficiently exchange data can significantly improve how important clinical and administrative information is communicated between healthcare professionals. As a result, e-health systems have the potential to unlock substantially greater quality, safety and efficiency benefits.[2]

1.9 Australia's broadband performance has fallen dramatically over the past few years.

1.10 The latest OECD figures for its 30 member countries rank Australia 16th in broadband take up levels and 10th on most expensive subscription prices.

1.11 Australian Bureau of Statistics figures, released in 2008 showed the percentage of homes with broadband by State as;

- South Australia 30%
- Tasmania 29%
- Northern Territory 32%
- Western Australia 41%
- New South Wales 42%
- Victoria 42%
- Queensland 41%
- ACT 53%

1.12 Further, in an interview with Alan Kohler on 16 July 2008, Kate McKenzie of Telstra Wholesale stated:

> I guess one of the important motivators for the building of the FTTN (fibre-to-the-node) network is that at the moment only about 20 per cent of

1 www.digitaleducationrevolution.gov.au

2 http://www.nehta.gov.au

> customers can actually get 20 megabytes of speed. The other two thirds in metropolitan regions can't even get 12 megabytes and more than 50 per cent of people in the country can't get 12 megabytes.

1.13 Similar evidence was provided by Terria (formerly FANOC) in its 2007 submission in support of its Special Access Undertaking. FANOC stated that a speed of 12 Mbps is achievable using ADSL2+ at about 1.5 km from an exchange. Beyond 1.5 km the customer speeds are expected to drop below 12 Mbps. According to FANOC, approximately 33 per cent of the metropolitan population live within 1.5 km of a Telstra exchange, and are therefore theoretically capable of receiving ADSL2+ services with a speed of around 12 Mbps. The remaining 67 per cent of metropolitan customers require fibre to be extended beyond the current exchange locations to push DSL closer to them.

1.14 Furthermore, Government Senators note the comments by David Quilty (Telstra) to the Senate Select Committee on 11 November 2008 in which he stated:

> …in terms of those exchange areas which are ADSL enabled, less than 50 per cent of the customers—the households and businesses—in those exchange areas can get the full speed benefits that ADSL would provide. Primarily, that is due to the distance limitations. To an extent, it is also due to the other matters that you raised. I would hesitate to guess, but in terms of those other matters it would be less than 10 per cent. Again, the fundamental point here is that ADSL is distance limited and it is also a 'best endeavours' broadband solution. If you read the small print in your contract it always says 'up to eight megabits' or 'up to 20 megabits' if you take the full speed, whereas if we move to a network where fibre is pushed to the node there is the ability to provide guaranteed speeds. I think that is a fundamental proposition in terms of delivering the sorts of value added services that everyone is going to take for granted in a decade's time.

Howard Government's Broadband Legacy

1.15 For the 11 ½ years of its duration, the Howard Government had only one telecommunications policy – the privatisation of Telstra. Every other policy issue in the sector was secondary to this obsession and open to sacrifice in service of the then Government's larger aim. In this context, the Howard Government took a short-term, politically motivated approach to broadband infrastructure investment and telecommunications policy more generally. Where telecommunications infrastructure programs were developed under the Howard Government, more often than not they were designed to satisfy a political constituency needed to support privatisation rather than to resolve a policy problem facing the Australian people. Where regulatory reforms were undertaken, the Howard Government was always careful to ensure that these reforms did not impede the larger goal of privatisation.

1.16 As a result, the Howard Government's telecommunications policies were focused on the short-term; broadband bandaids for infrastructure blackspots and uncoordinated pork barrelling for rural and regional Australia. The Australian people

saw 18 failed policies under the Howard Government that may have achieved the Government's political aims, but produced little in the way of substantive outcomes and left Australia trailing our international peers.

1.17 Importantly, the Howard Government proved completely incapable of resolving regulatory impasses to infrastructure investment. In 2005, after discussions broke down with the ACCC, the Howard Government entered into bilateral, 'closed door' negotiations with Telstra to build a fibre to the node (FTTN) network. They were unable to reach an outcome.

1.18 The Howard Government was also unable to provide regulatory certainty to Telstra that would have enabled it to rollout ADSL 2+ broadband in a number of exchanges across Australia.

1.19 In February 2008, following an assurance from the Australian Competition and Consumer Commission (ACCC), the Minister for Broadband, Communications and the Digital Economy was able to conclude that there was a high degree of regulatory certainty in relation to the ACCC's approach to wholesale ADSL2+, and this position was expressed to Telstra. As a result Telstra enabled ADSL 2+ technology in an additional 900 local exchanges serving 2.4 million households across Australia.

The Communications Fund

1.20 Clause 2.79 of the Majority Report notes that the Howard Government established the $2 billion Communications Fund that made available $133 million per year to improve telecommunications in rural and regional Australia.

1.21 The Communications Fund is perhaps the best example of the Howard Government's short-term, politically motivated approach to telecommunications. The Communications Fund was established not to address any identified policy need. The Communications Fund was nothing more than a hastily cobbled together slush fund whose sole purpose was to ensure Senate support for the sale of Telstra.

1.22 The absence of policy rationale for the Communications Fund is clear from the public statements of the Government and Senators at the time. On the 7th August 2005 the then Minister for Communications, Senator Coonan questioned the need for the fund noting:

> The ... most important thing is you have to identify an area of unmet need. You can't, I would think, spend more than $100 million a year, no matter how you tried. So the idea of some large fund for some unspecified purposes, I think, has got a very long way to go in debate.

1.23 Yet despite these comments, just ten days later, the Minister announced the establishment of the Communications Fund. In effect, the policy rationale and administrative arrangements for a then unprecedented, $2 billion perpetual fund were developed by the then Government inside of 10 days.

1.24 As was outlined in the Labor Senators' Dissenting Report in the *Inquiry into the Telstra (Transition to Full Private Ownership) Bill 2005 and related bills*:

> Officials from the department made clear that no independent, needs based, modelling was done to determine the appropriate size of the fund. The touted $2 billion is just a number that the Government persuaded the National Party to accept.
>
> No evidence was presented to the inquiry to suggest that a $2 billion fund will be sufficient to address the future telecommunications needs of rural and regional Australia.

1.25 Compounding this lack of policy justification, in response to Opposition criticism of this process at the time, Senator Joyce issued a press release in which he stated that he was *'happy'* for the Communications Fund to be described as a *'slush fund'*.

1.26 Yet another ANAO audit into the actions of the previous government in the establishment of this fund recently found that as a result of the compressed timetable for the establishment of the fund, there was no opportunity for the then government to obtain independent, expert advice on the investment strategy for the fund. In fact, the Investment Strategy for the fund was developed on the run on the basis of Ministerial statements made in the Senate during the committee stage of the bill. Further, during this period, the Minister ignored two warnings from Treasury regarding the lack of a clear investment strategy for the fund.

1.27 As a result of this lack of preparatory work, the final Investment Strategy for the Fund was not complete until June 2007. This was more than 15 months after the initial six month term deposit in which the $2 billion principle was parked after the passage of the legislation had expired. Even at this stage, the Department spent only $10,000 on external investment advice for a perpetual fund worth $2 billion.

1.28 The Communications Fund is a prime example of the politically motivated, short term nature of telecommunications policy making under the Howard Government. This approach failed to deliver for Australians, particularly those in rural and regional Australia. As is noted elsewhere in the report, the National Broadband Network (NBN) provides an opportunity to take a new approach to telecommunications infrastructure in Australia; one focused on long-term outcomes rather than on short term political fixes.

1.29 In light of this, Government Senators note the establishment of the Building Australia Fund (BAF). $4.7 billion will be drawn from the BAF to fund the NBN. In addition, the BAF will be able to be drawn up for future telecommunications infrastructure projects.

Howard Government's OPEL solution

1.30 Clauses 1.17 – 1.30 of the Majority Report of the Senate Select Committee outlines the establishment of the OPEL project by the Howard Government and the Rudd Government's decision to cancel this project.

1.31 The reality of the OPEL project differs substantially from the account provided by the Majority Report. The origins of the OPEL project lie in the Howard Government's efforts to ram through the privatisation of Telstra in August 2005. At the time of the introduction of legislation to facilitate the full sale of Telstra, the government also introduced the Connect Australia package of spending programs with the objective of ensuring Senate support for the sale. The $600 million Broadband Connect policy was one of a number of policies introduced as part of this package. It was a program designed to fix a political problem rather than a policy problem.

1.32 When a year later, in September 2006, the then Minister for Communications, Helen Coonan announced the release of the Broadband Connect Program guidelines, she stated that under the program the Government:

> …will invest up to $600 million in rural, regional and remote Australia to encourage private sector rollouts of broadband infrastructure.

1.33 However, soon after the Australian Labor Party announced its policy to facilitate the roll out of a National Broadband Network, public speculation emerged that the Howard Government intended to increase the amount of funding allocated to this project.

1.34 This speculation was subsequently confirmed when the Howard Government executed a $958 million Funding Agreement with OPEL Networks Pty Ltd, a joint venture between Optus Networks Pty Ltd and Elders Telecommunications Infrastructure Pty Ltd, for the provision of a broadband network covering identified under-served areas and premises across regional Australia.

1.35 At this time, the then Shadow Minister for Communications, Senator Stephen Conroy contacted the Australian National Audit Office regarding the circumstances of the $358 million increase in funding under the Broadband Connect Process.

1.36 In response this correspondence, the Australian National Audit Office (ANAO) undertook a 'preliminary review' into the selection of the preferred applicant under the Broadband Connect Program and found that:

> DCITA issued two clarifications to the Guidelines dated 3 November and 24 November 2006. Neither clarification mentioned the potential availability of additional funds beyond $600 million.
>
> Departmental records and advice indicate that one potential applicant sought information from DCITA on whether there could be more funding made available to BCIP. Minutes of a briefing with this potential applicant in November 2006 noted that DCITA:

> ‘could not comment on whether more than $600 million could be made available, however, the Government may commit further funds if it believes additional funding is justified and will bring significant benefits.’

1.37 The ANAO went on to state that:

> In our view, it would have been prudent for DCITA to inform all potential applicants of its advice on whether additional funding could be made available under the program. This would be consistent with sound practice that recognises the need to provide consistent information to all applicants, and the approach DCITA had adopted for other matters of clarification in relation to this program.
>
> The possibility that the Government may commit additional funds to the program if it believed that additional funding was justified and would bring significant benefits, may have influenced some potential applicants and applications.

1.38 While the ANAO ultimately found that the Broadband Connect guidelines were broad enough to allow the Government to act in this way, the flaws in the Broadband Connect process were obvious.

1.39 In response to these flaws, in August 2007, Telstra, an unsuccessful proponent in the Broadband Connect process commenced legal action in the Federal Court against the then Minister, Senator Helen Coonan, seeking disclosure of the documents upon which the former Minister based her decision to award the Broadband Connect contract to OPEL.

1.40 Prior to the 2007 Federal Election, the ALP publicly committed to honouring the contract between the Commonwealth and OPEL according to its terms.

1.41 A precondition of the funding agreement was that OPEL undertake testing and mapping to substantiate the service coverage set out in its proposal. In particular, OPEL was required to confirm its proposal would provide coverage reasonably equivalent to 90% of under-served premises identified by the then Department of Communications, Information Technology and the Arts. OPEL's testing was verified by the Australian Communications and Media Authority and Enex TestLab.

1.42 OPEL Networks' Implementation Plan, submitted to the Department of Broadband, Communications and the Digital Economy (DBCDE) on January 9, failed to meet the terms of a contract made with the previous Government. The assessment found that OPEL did not achieve the required service coverage. The OPEL network would cover only 72% of identified under-served premises.

1.43 On the basis of DBCDE's assessment, the Government determined that OPEL's Implementation Plan did not satisfy the condition precedent of the funding agreement, and as a result the contract was been terminated.

1.44 Government Senators note that this was not a political decision. OPEL networks would cover only 72% of under-served premises identified by the Department of Broadband, Communications and the Digital Economy. It would have been fiscally irresponsible for the Government to sign off on a $958 million contract that did not meet its terms.

The Australian Broadband Guarantee

1.45 Clause 1.21 (c) of the Majority Report notes that a further element of the Howard Government's Australia Connected package, of which the OPEL project was the most prominent aspect was support for:

> …the Australian Broadband Guarantee, a safety net entitling Australians living in the most remote or difficult locations to a broadband subsidy of $2750 per household.

1.46 Unfortunately for Australians in rural and regional areas, this commitment was the shortest of the Howard Government's short term broadband policies. In fact, in the lead up to the 2007 Federal Election the former Howard Government made no commitment to continue supporting the Australian Broadband Guarantee beyond June 2009.

1.47 As is noted in the Majority Report it was up to the Rudd Government to commit $270.7 million to the Australian Broadband Guarantee over the next four years to fund the program until 2012.

1.48 Moreover, in July 2008, the Rudd Government further revised the program guidelines for the ABG to improve the level of service consumers receive under this program. For example, the minimum download cap was increased from 1G to 3G per month, and registered proponents were required to introduce measures to ensure that consumers did not inadvertently receive 'bill shock' if they exceeded this download cap in any one month.

The Howard Government's fibre to the node solution

1.49 Clause 1.21 (b) of the Majority Report notes another aspect of the Howard Government's 'Australia Connected' policy, namely:

> …a new commercial fibre optic network, facilitating a fibre network build in **cities and larger regional centres** [bold added]

1.50 As with the other elements of the Australia Connected policy, there was less to this promise than meets the eye.

1.51 The former Government's broadband policy for a new commercial fibre optic network was outlined in a press release on 18 June 2007 which stated:

> The Government will also conduct an open and competitive bids process and legislate to enable a new high speed broadband network for built-up areas, without the need for taxpayer funding…

> …the Government's decision to proceed with a competitive bids process reflected the enhanced interest of commercial players that had recently become evident…
>
> To facilitate this process, the Government will establish an Expert Taskforce to ensure an open and transparent process for assessment of bids to build a fibre-to-the-node network. Following an open and transparent examination, the Government will legislate to ensure the nation is getting a top class service…

1.52 In certain ways the approach the former Government took to deploy a high speed fibre optic network was similar to the approach taken by the Australian Labor Party in opposition and now in Government.

1.53 The former Government appointed an arms length independent 'Expert Taskforce' to assess proposals from the private sector.

1.54 The Expert Taskforce was to assess proposals and provide a recommendation to the relevant Minister.

1.55 In September 2007, the Expert Taskforce released Guidelines which invited proponents to submit proposals, including the regulatory or legislative changes that would be necessary for them to build the FTTN. The proposed legislative changes were left completely open to proponents to suggest, and there was no forward-looking regulatory framework set out by the Government, or the Expert Taskforce. In its report to the former Minister, the Expert Taskforce revealed its thinking on this issue:[3]

> Consistent with the general comments above about not being prescriptive, the Expert Taskforce has taken the view that proponents should have the flexibility to develop proposals as they see fit, knowing they will be assessed competitively against the stated objectives and assessment criteria. The proposed final Guidelines do not therefore express a preference for a vertically-integrated model or one that structurally-separates wholesale and retail operations. That said, a key element of the Expert Taskforce's assessment will be the extent to which a proposal provides for open and non discriminatory access to new network infrastructure and services, in order to promote efficiency and competition. The Expert Taskforce is interested in how this will be achieved. While the proposed final Guidelines do not preclude proponents from putting forward proposals within the parameters of the current legislative framework the Expert Taskforce expects that the investment in new broadband infrastructure and services will be facilitated by the introduction of new legislative and regulatory arrangements.

1.56 However, in other key ways, the approach by the former Government under this process was significantly different to the Rudd Government's approach.

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3 Report By The Expert Taskforce On Its Final Guidelines And Public Consultation On Its Draft Guidelines For High Speed Broadband Network Infrastructure Proposals, paragraph 28, September 2007.

1.57 The former Government's Expert Taskforce Guidelines only called for an FTTN build in *'capital cities and major regional centres'*, although what constituted a 'major regional centre' or where the boundaries of 'capital cities' ended or was never defined. In effect, the Howard government had decided to entrench two tiers of telecommunications services throughout Australia; a fibre based service for the capital cities and a wireless based service for everyone else.

1.58 In contrast and as noted in the Majority Report, the Rudd Government has made a commitment to rollout a high speed fibre optic network to 98% of Australian homes and businesses. This commitment is reflected in the Request for Proposals (RFP) for the National Broadband Network (NBN).

1.59 The former Government's Expert Taskforce Guidelines did not set explicit objectives for a benchmark minimum speed that the new fibre network should offer. Instead, their Guidelines said in this context that (paragraph 3.13) *'proposals should produce better outcomes than are currently generally available", although the speeds that were 'currently generally available'* were never precisely defined to provide a benchmark.

1.60 In contrast, the Rudd Government has set a clear objective of minimum 12 Mbps downlink speeds for the NBN, which proponents have been invited to meet or exceed within the framework of a competitive assessment process. The Rudd Government has also recognised the importance of 'uplink' speeds in the RFP as a key objective is that the NBN will support symmetric applications like video-conferencing.

1.61 The former Government's Expert Taskforce Guidelines did not include any mechanism for ensuring that potential proponents had access to the necessary 'network information' required to prepare a credible and robust proposal. Despite most of this information residing with one potential proponent (Telstra), their Expert Taskforce was satisfied that proponents would be able to prepare proposals *'on the basis of clearly articulated assumptions and/or information that is public, commercially available, or otherwise available to them…'*.[4] In other words, proponents were expected to guess, and proponents with more information had an inherent advantage before the process even started

1.62 In contrast, the Rudd Government's commitment to a genuinely competitive, open, fair process was demonstrated by its decision to pass legislation to ensure that all proponents would have access to necessary network information required to prepare and cost a robust proposal. In determining the necessary information set, the Rudd Government consulted the industry as well as relying on the advice of its Expert Panel as well as its other specialist advisers. This information was handed over the

4 Report By The Expert Taskforce On Its Final Guidelines And Public Consultation On Its Draft Guidelines For High Speed Broadband Network Infrastructure Proposals, paragraph 19, September 2007.

pre-qualified proponents on 3 September 2008, and from this date proponents were given 12 weeks to finalise their proposals.

1.63 The former Government's Expert Taskforce Guidelines did not provide ay explicit guidance on the role that the ACCC would play in the assessment of proposals. Indeed, the only point at which the ACCC was mentioned in the Guidelines was to state (paragraph 5.7) that the Expert Taskforce:

> …may assess proposals with the assistance of relevant Australian Government departments and agencies, including the Australian Communications and Media Authority and the Australian Competition and Consumer Commission.

There was no commitment that the ACCC would have received proposals for their assessment.

1.64 In contrast, the Rudd Government's RFP sets out a clear role for the ACCC. The RFP states that the ACCC will receive proposals; conduct an individual and comparative assessment of them within the areas of its expertise; and provide a report to the Expert Panel for their consideration. The RFP also states that the ACCC has an ongoing advisory role throughout the process to assist the Expert Panel.

The National Broadband Network Process

1.65 As noted in the Majority Report, as part of its election commitment, the Rudd Government has a stated goal to improve broadband opportunities for all Australians. It has committed to invest up to $4.7 billion and consider regulatory changes for a National Broadband Network providing a minimum 12 Mbps to 98 per cent of homes and businesses.

1.66 The National Broadband Network will set the foundation for Australia's future economic productivity and prosperity. The National Broadband Network is one of the largest infrastructure investments undertaken by any Australian Government. It is a vital building block for our participation in the future digital economy.

1.67 As noted in Clause 1.31 of the Majority Report, on April 11, the Government released the formal Request for Proposals for the NBN. While Clause 1.31 canvases some of the objectives of the NBN, in fact, the RFP contains 18 clear objectives for the NBN determined by the Government. These objectives are set out in Attachment A.

1.68 The RFP process was specifically designed by the Government to maximise competitive tension between potential proponents in order to achieve the best outcome for Australians and the best use of $4.7 billion in taxpayer funds. In light of this, the RFP does not mandate the forward looking regulatory settings that will apply. In this way, the NBN process is focused on outcomes, rather than prescribing specific mechanisms for achieving these outcomes. The RFP retains flexibility to allow

proponents to put forward innovative proposals for meeting the government's objectives. As the Chairman of Terria, Michael Egan has noted:

> Despite some initial scepticism on my own part, I now think that Senator Conroy got it right. There is nothing like competition to make bidders sharpen their pencils.
>
> Likewise, by setting objectives rather than hard and fast requirements, Conroy has forced proponents to put their thinking caps on to come up with the best overall solutions.

1.69 The strong response from industry proponents to the RFP process is a vindication of the Government's fair and open process that has produced substantial competitive tension.

1.70 Six proponents have made public statements confirming they have submitted proposals to the RFP process. Acacia, Axia, Optus and Telstra have confirmed they have submitted a proposal to build a national broadband network. The Tasmanian Government and TransACT have submitted builds to build high speed broadband networks in Tasmania and the ACT respectively.

1.71 As a result of this completive tension, the Government is now better placed to ensure that the NBN process results in the best possible outcome for Australians.

1.72 The Government's independent Panel of Experts, its specialist advisers and the Australian Competition and Consumer Commission are assessing the proposals. The ACCC is expected to provide a report to the Expert Panel in January. The Expert Panel will provide a report to the Minister by late January.

1.73 Clause 2.126 questions the time the ACCC to view bids. Government Senators note that the ACCC confirmed to the committee that it would be able to perform its role in the process within that time frame.

1.74 In contrast, we can compare the previous Government's Expert Taskforce Guidelines where the ACCC itself was not even assured of having a role in the assessment process.

Public Consultation

1.75 Through the public submission process on regulatory issues relating to the NBN, the Government actively encouraged public debate.

1.76 Clause 1.41 of the Majority Report notes that the Government invited industry and public interest groups to provide submissions on regulatory issues associated with the National Broadband Network, including appropriate regulatory arrangements and consumer safeguards. Over 80 submissions were received and made available to inform proponents when formulating proposals to build and operate the National Broadband Network. The submissions are also being considered by the Department, its Specialist Advisers as well as the Expert Panel. Copies of the submissions are publicly available online at: www.dbcde.gov.au/regulatorysubmissions.

1.77 As noted in Clause 1.42 of the Majority Report the Government also called for submissions on policy and funding initiatives to provide enhanced broadband to rural and remote areas. The submissions were considered by the Regional Telecommunications Independent Review Committee, led by Dr Bill Glasson AO, who provided a comprehensive report to Government in September. The report was tabled in Parliament on October 15, and is publicly available online at: www.rtirc.gov.au. The submissions on policy and funding initiatives to provide enhanced broadband to rural and remote areas are also being considered by the Government in determining appropriate options to improve telecommunications in rural and remote areas of Australia. Copies of the submissions are available online at: www.dbcde.gov.au/remotebroadband.

1.78 Clause 2.115 incorrectly implies that the ACCC or Panel of Experts report will not be published. Government Senators note that the Minister has made it clear that, subject to legal advice, both reports will be made publicly available.

1.79 Clauses 2.115 and 2.118 of the Report incorrectly implies that there will be no public scrutiny of the regulatory changes resulting from the NBN process. As the Minister has made clear, changes to the telecommunications regulatory regime will undergo Parliamentary scrutiny in the same way as any other bill.

1.80 In this context, Government Senators further note that the former Government provided absolutely no opportunity for public scrutiny of regulatory issues including wholesale terms and conditions during its negotiations for the $958 million Broadband Connect program.

Coverage of the NBN

1.81 The RFP clearly states an objective that the NBN project should establish a national broadband network that *'covers 98 per cent of Australian homes and businesses'* and that *'this figure is to be taken as the national aggregate of homes and businesses at the end of the roll-out period.'*

1.82 The former Government made no commitment as to how far fibre would extend under their policies. In fact, they were happy to entrench a two tier system by publicly stating that fibre would reach only to *'capital cities and major regional centres'*.

1.83 The previous Government, and the current Opposition frequently claim that the OPEL project would cover 99 per cent Australians. In fact, as recently as 26 November, Senator Minchin claimed in a media release that OPEL:

> …would have resulted in 99 per cent of Australians having access to affordable high speed broadband services by the middle of 2009.

1.84 Not to be outdone, the Leader of the National Party, Warren Truss claimed in Parliament as recently as the 25th November that the Howard government would have delivered broadband of *'up to 50 mbps'* to *'100% of the population'*!

1.85 Government Senators note that the 99 per cent coverage to which Senator Minchin refers to the **combination** of packages put forward in the Australia Connected Package that is outlined in Clause 1.21 of the Majority Report. This was confirmed in a June 18 2007 press statement by the former Minister for Communications that stated:

> The centrepiece of **Australia Connected** is the immediate rollout of a new, independent, competitive and state of the art national broadband network that will extend high speed services out to 99 per cent of the population and provide speeds of 12 megabits per second by mid 2009." (underline added)

1.86 Government Senators note, given that the former Government made no commitment as to how far their FTTN would extend, it is quite possible that there would have been a shortfall between the coverage of the FTTN and the OPEL Network.

1.87 It has always been open for proponents to exceed the objectives set out in the RFP. To this end, Government Senators note that the public statements of a range of proponents indicate that the Government has received proposals offering broadband speeds of up to 90 Mbps. Government Senators also note that a public statement of one proponent exceeds the Government objective of 98 per cent coverage. Government Senators finally note that all proposals will be assessed by the Expert Panel against the RFP.

1.88 The Australian Broadband Guarantee currently enables Australians who do not currently have access to metro-comparable broadband services or who will live outside the 98% NBN footprint to have access to a subsidizes broadband service. Information about the ABG is available at www.dbcde.gov.au.

1.89 Clause 2.90 notes that:

> …the committee heard calls for the $4.7 billion to be targeted to areas that are currently under serviced, rather than fund a fibre upgrade to urban and other areas that are already able to access broadband

1.90 The RFP clearly states an objective for the NBN to reach 98 per cent of Australian homes and businesses. As at 30 June 2006, 63.2 per cent of Australia's population lived in the state and territory capital cities, thus the NBN will cover a significant portion of people living rural and regional Australia.

Regulatory Issues

1.91 Government Senators agree with the sentiment expressed in the Majority Report that the NBN provides an opportunity to address the failings of the current regulatory regime implemented by the former Government.

1.92 In particular, Government Senators agree that Clause 3.38 notes that the RFP addresses common principles including:

> …facilitating competition through open access arrangements, and ensuring equivalence of price and non-price terms and conditions.

1.93 Government Senators note that the RFP contains a clear objective that the NBN will be a network that:

> …facilitates competition through open access arrangements that ensure equivalence of price and non-price terms and conditions, and provide scope for access seekers to differentiate their product offerings.

1.94 Furthermore the RFP states:

> The Government is therefore determined to ensure that appropriate open access arrangements are in place to promote competition and ensure efficient investment. In this context it will be important to ensure that access is provided on equivalent price and non-price terms and conditions.
>
> Proponents should submit their proposed arrangements for ensuring open access to the NBN, including measures or models to ensure that access is provided on equivalent price and non-price terms and conditions. If a Proponent proposes to supply both wholesale and retail services it should demonstrate what structural measures or models it proposes be put in place and maintained to prevent inappropriate self-preferential treatment and ensure that effective open access is achieved on the terms required by the Commonwealth.

1.95 Clause 2.60 of the Majority Report incorrectly notes that potential NBN proponents should *'keep in mind'* the objective relating to open access. This ignores the fact that the RFP makes it clear that proposals will be assessed against the 18 objectives and the 6 criterion within the framework of a competitive assessment process. In this regard, the RFP provides that:

> The evaluation process is outlined at section 10 of this RFP. Within the framework of an overarching value-for-money assessment, the evaluation criteria against which Proposals will be assessed are:
>
> 1. the extent to which the Proposal meets the Commonwealth's objectives for the NBN project (as set out in clause 1.3);
>
> 2. the capacity of the Proponent to roll-out, maintain, upgrade and operate the network;
>
> 3. the nature, scope and impact of any legislative and/or regulatory changes that are necessary to facilitate the Proposal;
>
> 4. the cost to the Commonwealth of the Proposal;
>
> 5. the acceptability to the Commonwealth of the contract terms and conditions proposed by the Proponent and the extent to which the Proposal departs from the Commonwealth's notified commercial terms (if any); and
>
> 6. the extent of the Proponent's compliance with the RFP.

1.96 Government Senators note that the former Government took effectively the same approach as the Rudd Government on the issue of *'open access'* and on being non-prescriptive on the set of regulatory arrangements that will eventually achieve it.

1.97 Paragraph 3.23 of the previous Government's Expert Task force Guidelines stated that:

> Open access is typically linked with non-discriminatory access. Open and non-discriminatory access could involve the network operator providing access seekers with ease of interconnection to its network at convenient sites on a timely basis (including access to necessary network information and operational support systems) and provision of access and other wholesale services.

1.98 Government Senators note, as discussed in the section of the report entitled *The Howard Government's fibre to the node solution* that the former Government remained non-prescriptive on regulatory issues, including the definition of open access.

Rollout of the NBN

1.99 The Rudd Government took the initiative in the RFP of raising the issue of whether proponents were able to focus the early phases of the progressive NBN rollout on areas that cannot currently access high speed broadband.

1.100 Paragraph 1.5.5 of the RFP for the NBN states:

> Proponents should indicate the extent to which Proposals are able to prioritise areas that cannot currently access minimum speeds of 12 Mbps.

1.101 Government Senators note that from the evidence considered in this inquiry, it is not just people in regional Australia that are having trouble accessing high speed broadband. The Committee also heard that many people in metropolitan Australia are currently prevented from accessing high speed broadband for many varied reasons, including the existence of broadband blocking technologies such as Pair Gain, the degradation of the copper connection to their house or the fact that they simply live too far away from the exchange building.

1.102 Government Senators further note that it is ironic that members of the former Government would now be such strong supporters of a roll-in strategy, whereas the deployment of the NBN is mandated from the under-served areas as a first priority. In many areas, the issue of 'roll-out' versus 'roll-in' was not a problem faced by the previous Government because their fibre based network was never anticipated to extend beyond the capital cities and major regional centres.

1.103 Government Senators welcome the sentiment in clause 4.26 that states:

> the Government should not rely on ad hoc funding programs to prop up the provision of what is now seen as an essential service…

1.104 The Report fails to note that the Government's RFP addresses migration to the NBN. Clause 1.5.13 of the RFP states that

> The Government will need to be assured that existing retail customers will experience no or minimal disruption to their services, and also that the migration of wholesale customers will not be subject to anti-competitive delays or processing timetables. Proponents should ensure that equivalent (or superior) services to those that are currently available can be offered to all existing customers.

1.105 Clause 1.4.6 of Schedule 2 of the RFP requests proponents to describe in detail arrangements to migrate existing wholesale services and customers to the NBN, and the RFP also includes risk of migration for wholesale customers within its risk assessment framework (see p. 39 of Schedule 2) .

Technology

1.106 The Government's RFP includes a clear objective that the NBN is rolled out using fibre to the node or fibre to the premise infrastructure.

1.107 Government Senators note that the claimed maximum download speeds for wireless broadband technologies, e.g. 14.4 Mbps are in fact shared between multiple users. In other words, the more users on the system the slower the user experience.

1.108 Government Senators acknowledge that wireless technologies depend on fibre backhaul, which has far superior capacity to support large amounts of data.

1.109 Government Senators note that Clause 4.49 of the Majority Report is incorrect. Clause 9.3.1 of the RFP allows potential NBN proponents to propose a state-based solution:

> The Commonwealth may consider stand-alone State or Territory-based Proposals where any such Proposal is assessed as assisting the Commonwealth to achieve an outcome which best satisfies the Commonwealth's stated evaluation criteria including its overall NBN Project objectives. Such Proposals:
>
> 1. should provide sufficient information to satisfy the Schedule of Required Information;
>
> 2. must meet the conditions for participation specified in clause 10.9; and
>
> 3. should identify how a stand-alone State or Territory-based solution will contribute to meeting the Commonwealth's objective of achieving coverage for 98 per cent of Australian homes and businesses."

Contradictions in Recommendations of Majority Report

1.110 Government Senators also note a series of internal inconsistencies between the recommendations of the Majority Report. These contradictions are characteristic of the desire for Opposition Senators to 'walk both sides of the street' throughout this inquiry.

1.111 On the one hand, Opposition Senators claim to support the need for broadband infrastructure investment in Australia, while on the other hand they have done everything possible to obstruct and undermine the Government's NBN process.

1.112 Opposition Senators claim to want broadband infrastructure to be speedily delivered to the Australian public, then insist that the NBN process ought to be delayed by yet another round of public consultation.

1.113 On the one hand, clause 2.127 of the Report notes:

> The committee questions the appropriateness of the timeline for the evaluation of the RFP, believing it will not permit the necessary level of scrutiny by either the Expert Panel or the ACCC to select the successful proponent for the NBN.

1.114 Similarly, clause 3.99 notes:

> Firstly there is the criticism that the timeframe not only for the assessment of proposals, but for the legislative and parliamentary processes required to make the changes to the regulations and legislation, is inadequate.

1.115 Yet, clause 3.123 notes:

> The committee believes that it is in the interest of the government, the industry and the Australian people to ensure that delays to the timeframe for the implementation of the NBN are kept to a minimum.

Absence of Consumer issues in Majority Report

1.116 Government Senators also note with disappointment the fact that the Majority report fails to address the importance of consumer concerns to the NBN.

1.117 In this regard, Government Senators note the establishment of ACCAN which will be funded under section 593 of the *Telecommunications Act 1997*. It will commence operations as the peak communications consumer body representing the interests of communications consumers from 1 July 2009.

1.118 Government Senators also note that several consumer organisations responded to the Government's public invitation for submissions on the NBN, including the Australian Telecommunications Users' Group and Telecommunications Disability Consumer Representation (TEDICORE, a project of the Australian Federation of Disability Organisations), and a number of organisations which have representation on

the founding board of ACCAN such as the Internet Society of Australia and the Consumers' Telecommunications Network. As detailed in the NBN RFP (clause 10.6.2), the Panel of Experts will be able to have regard to the regulatory submissions in its evaluation of proposals.

1.119 Government Senators further note that the NBN RFP contains a number of clauses that affect consumers. In particular, Clause 1.3 of the RFP clearly sets out the Commonwealth's 18 objectives to establish a national broadband network that, amongst other things:

- enables uniform retail prices on a national basis;
- continues to promote the long-term interests of end-users;
- facilitates competition through open access arrangements that ensure equivalence of price and non-price terms and conditions, and provide scope for access seekers to differentiate their product offerings;
- enables low access prices that reflect underlying costs while allowing Proponents to earn a rate of return on their investment commensurate with the risk of the project; and
- provides benefits to consumers by providing choice to run applications, use services and connect devices at affordable prices;

1.120 Clauses 1.5.10 - 1.5.23 of the RFP provide guidance in relation services, competition and open access, including the long-term interests of end-users and pricing. In particular, clause 1.5.12 states:

> Proponents should outline how consumers will be able to run applications, use services and connect devices at affordable prices. Proponents should outline the type of retail services that could be offered, for both business and residential consumers. The Commonwealth expects that consumers will enjoy affordable retail prices for NBN services, but also notes that services need to be priced so they are economically viable.

1.121 As indicated in clause 10.3.2, Proposals will be assessed by the Panel of Experts against the evaluation criteria specified in the RFP to identify the Proposal or Proposals that represent the best value for money. The evaluation against criterion 1 will involve an assessment of the extent to which a Proposal meets the Commonwealth's objectives for the NBN process as set out in clause 1.3.

1.122 As indicated in clause 10.1.3 of the RFP, the value for money assessment of Proposals includes the overall costs and benefits of the Proposal (including long-term costs and benefits) to the Australian community as a whole.

1.123 Section 10.4 of the RFP outlines the role of the ACCC in the NBN process. Clause 10.4.2 states:

> The ACCC will provide the Panel with ongoing advice on Proposals, including advice on issues such as wholesale access services and prices, access arrangements, proposed legislative or regulatory changes and the

likely impact of Proposals on pricing, competition and the long-term interests of end-users in the communications sector.

1.124 Clause 10.4.2 of the RFP further states that the ACCC will provide a written report to the Panel. Clause 10.4.3 states that the Panel will consider the advice provided by the ACCC as part of its assessment process.

1.125 Schedule 2 of the RFP describes the information that Proponents should provide in their Proposals. The information provided by Proponents will be used in the evaluation of their Proposals. Clause 1.5(a) of Schedule 2 of the RFP states:

> Proponents should describe the extent to which the Proposal will benefit consumers (residential, business and others) over the short and long-term through the availability of communications services and applications at affordable prices.

1.126 Clause 1.5.4 of Schedule 2 of the RFP further states:

> For wholesale-only Proposals:
>
> (a) Proponents should provide estimated price and non price terms and conditions for key entry-level and basic retail services that a wholesale customer could offer consumers. Proponents should also set out the rationale for this estimate.
>
> (b) Proponents can if they wish also provide anticipated price and non price terms and conditions for any other retail services and applications that a wholesale customer could offer consumers. Proponents should also set out the rationale for this estimate.
>
> For Proposals that offer retail services:
>
> (c) Proponents should describe the arrangements for the supply of retail services and applications and the range and nature of the proposed retail services and applications (i.e. the levels of functionality and performance).
>
> (d) Proponents should describe the proposed price and non-price terms and conditions for key entry-level and basic services to be supplied, including:
>
> (i) price and non-price terms and conditions for the key entry-level and basic retail services over the investment term of the infrastructure;
>
> (ii) any geographical variation in pricing, noting the Government's objective of uniform national pricing, or non-price terms and conditions – for example, connection or fault repair times; and
>
> (iii) any proposed approach to the re-adjustment of price terms and conditions over the investment term of the infrastructure.
>
> (e) In describing price and non-price terms and conditions for the retail services and applications, the Proponent should provide, on a per service basis, to the extent relevant, information including: downlink

and uplink speeds, connection and disconnection fees, service activation and deactivation fees, any periodic charges, billing arrangements, data usage allowances, any excess data fees, shaping policies and service level assurances.

(f) In providing pricing information for key entry-level retail services, the Proponent should identify any differences in proposed prices and non-price terms and conditions for residential and business customers.

All Proponents:

(g) Proponents should provide a comparison between the price and non-price terms and conditions of the proposed services and applications with those currently available.

(h) Proponents should explain the basis and rationale for the proposed price and non-price terms and conditions described above for retail services and applications, including costs and costing methodology, expected take-up rates and price adjustment mechanisms.

(i) Proponents should describe what will happen to retail prices over time if network traffic differs significantly from forecasts"

1.127 Clause 3.1 of Schedule 2 of the RFP requests, amongst other things, that Proponents indicate how any requested legislative or regulatory changes may impact on consumers.

1.128 Clause 3.2 of Schedule 2 of the RFP goes to compliance with legislative and other regulatory requirements and states

> Particular regard should be given to compliance with law enforcement, national security, emergency service and consumer safeguard requirements.

These and other relevant sections from the RFP are provided at Attachment B.

Senator Kate Lundy

……

Date: December 2008

Senator Glenn Sterle

…….

Date: December 2008

Attachment A

The Commonwealth's objectives for the NBN project, as stated in Clause 1.3.1 of the RFP, are to establish a national broadband network that:

1. covers 98 per cent of Australian homes and businesses;

2. is able to offer broadband services with a minimum 12 Mbps dedicated downlink transmission speed over each connection provided to a premises;

3. supports symmetric applications such as high-definition video-conferencing;

4. is able to support high quality voice, data and video services;

5. uses fibre-to-the-node or fibre-to-the-premises network architecture;

6. enables uniform retail prices on a national basis;

7. is rolled out and made operational progressively over five years from the date of execution of a contract between the Commonwealth and successful Proponent;

8. continues to promote the long-term interests of end-users;

9. has sufficient capacity to meet current and foreseeable demand and has a specified upgrade path within clear timeframes, consistent with international trends;

10. facilitates competition through open access arrangements that ensure equivalence of price and non-price terms and conditions, and provide scope for access seekers to differentiate their product offerings;

11. enables low access prices that reflect underlying costs while allowing Proponents to earn a rate of return on their investment commensurate with the risk of the project;

12. provides benefits to consumers by providing choice to run applications, use services and connect devices at affordable prices;

13. provides the Commonwealth with a return on its investment of up to $4.7 billion;

14. is compatible with the Government's related Fibre Connections to Schools initiative;

15. meets Government requirements for the protection of Australia's critical infrastructure;

16. is consistent with national security, e-security and e-safety policy objectives including compliance with laws relating to law enforcement assistance and emergency call services;

17. is consistent with Australia's international obligations; and

18. facilitates opportunities for Australian and New Zealand small and medium enterprises (SMEs) to provide goods and services to the project.

Attachment B

Select clauses from the NBN RFP relating to consumer interests and protection:

Services

1.5.10 Proponents should specify the services they intend to offer. Consistent with the network covering homes, businesses and other users, the Government is interested in both residential and business services. The network should be able to support a full range of services and applications that can be facilitated by greater access to high-speed broadband, including multicast, virtual private networks, high-definition video-conferencing, peer to peer content delivery and IPTV, as well as basic services such as telephony and other services such as smart meters.

1.5.11 The Government considers that consumers and businesses should be able to purchase key entry level voice and broadband services for the same price, irrespective of where they live or work. The NBN should enable uniform prices for basic entry level services. Proponents should provide the relevant pricing details for these services in their responses to Schedule 2.

1.5.12 Proponents should outline how consumers will be able to run applications, use services and connect devices at affordable prices. Proponents should outline the type of retail services that could be offered, for both business and residential consumers. The Commonwealth expects that consumers will enjoy affordable retail prices for NBN services, but also notes that services need to be priced so they are economically viable.

1.5.13 The Government will need to be assured that existing retail customers will experience no or minimal disruption to their services, and also that the migration of wholesale customers will not be subject to anti-competitive delays or processing timetables. Proponents should ensure that equivalent (or superior) services to those that are currently available can be offered to all existing customers.

Competition and open access

1.5.14 As noted above, the NBN will be a central platform for the Australian communications sector. The Government considers that the long-term interests of end-users should continue to be promoted. The Government is therefore determined to ensure that appropriate open access arrangements are in place to promote competition and ensure efficient investment. In this context it will be important to ensure that access is provided on equivalent price and non-price terms and conditions.

1.5.15. Proponents should clearly specify the wholesale access services they are proposing to offer in accordance with the details requested in Schedule 2. For example, Proponents should include details such as the proposed locations of Points of Interconnection, technical arrangements for service providers that acquire wholesale services and (where relevant) the availability of backhaul capacity to and from Points of Interconnection. In setting out these details, Proponents should keep in mind the Government's objective of providing scope for access seekers to differentiate their product offerings.

1.5.16 Open access arrangements should apply to wholesale services to be provided over the NBN, including upgrades of services, as specified in the contract for the NBN. In accordance with section 1.4 of Schedule 2, Proponents should submit their proposed arrangements for ensuring open access to the NBN, including measures or models to ensure that access is provided on equivalent price and non-price terms and conditions. If a Proponent proposes to supply both wholesale and retail services it should demonstrate what structural measures or models it proposes be put in place and maintained to prevent inappropriate self-preferential treatment and ensure that effective open access is achieved on the terms required by the Commonwealth.

1.5.17 Proponents should outline how their proposed access prices have been determined with reference to the underlying costs of providing services and demonstrate that the underlying costs are incurred on an efficient basis. Access prices should be set as low as possible, to ensure the best outcome for consumers, while allowing Proponents to earn a rate of return on their investment commensurate with the risk of the project. Proponents should explain the basis on which they have derived the cost of capital, including how investment risks have been calculated.

1.5.18 As requested in Schedule 2, Proponents should describe how arrangements will provide scope for access seekers to differentiate their services by allowing the customisation of technical parameters (including but not limited to speeds, quality of service, latency, jitter, contention ratios and interleaving).

1.5.19 Proponents should also describe how access services will allow access seekers to offer enhanced applications such as multicast, virtual private networks, high definition video-conferencing, peer to peer content delivery and IPTV if desired.

1.5.20 If Proponents are proposing to roll-out new network infrastructure in regions where competing networks already exist, including in some cases existing FTTN and FTTP networks, they should indicate this as requested in Schedule 2. The Commonwealth expects that there will not be economically inefficient duplication of existing FTTN or FTTP

infrastructure. Proponents are also encouraged to consider interconnecting with existing FTTN or FTTP roll-outs.

1.5.21 Where Proponents intend to use infrastructure owned by third parties they should indicate the type of access they will require and what arrangements have been reached, or would need to be reached, to ensure it is granted on terms and conditions that are satisfactory to it. Proponents should indicate their pricing assumptions for access to third party infrastructure, as requested in Schedule 2.

1.5.22 Proponents should identify the parts of the network that are commercially viable in their own right and those parts that would not otherwise be commercially viable without financial support.

1.5.23 If a Proponent considers that mechanisms are required to facilitate the Government's objective of enabling uniform retail prices and the delivery of services to premises within the NBN footprint, it should clearly set out the nature of this mechanism. For example, if Proponents are proposing cross-subsidy arrangements within access prices to enable uniform retail prices, they should clearly identify the extent of any cross-subsidization, as well as other relevant details (see Schedule 2). If a Proponent proposes another type of mechanism to enable uniform retail prices, it should set out details about the nature of its proposed mechanism and other relevant details (see Schedule 2).

Dissenting Report by Australian Greens Senators

1.1 The Australian Greens recognise the importance of broadband infrastructure to Australian society, economic development and aspects of environmental sustainability. We are entirely supportive of the investment of public funds in a high speed broadband network, provided that the investment serves the public interest and not the interests of dominant commercial players in the telecommunications industry.

1.2 The Select Committee's majority interim report and the dissenting report by Government Senators reflect the highly polarised nature of the debate around telecommunications in Australia, which has been marked by a history of false starts and failed ambitions.

1.3 The form of the current Request for Proposals (RFP) has been shaped primarily by the consequences of the decision to privatise the national telecommunications utility, culminating in the final T3 sale in 2006. The primary responsibility of Telstra's directors is now to increase value for Telstra shareholders, a responsibility pursued aggressively by the current management team.

1.4 In theory, the shareholders' interests will always align perfectly with the public interest, and market forces will provide services cheaper and more efficiently than a publicly owned utility.

1.5 In reality, there is a strong divergence between the public interest in a fast, inexpensive, open-access broadband network and Telstra shareholders' interest in achieving high rates of return from the advantages delivered by its incumbent position as the monopoly owner of much of the infrastructure on which its' competitors depend.

1.6 To maintain shareholder value, Telstra is seeking to leverage its fixed-line monopoly to gain monopoly control of the National Broadband Network (NBN). The network backbone is in effect a 'natural monopoly' – there is neither the desire nor the necessity to duplicate the physical ducts through which the fibre will run.

1.7 In this way the NBN is similar to the road network or electrical power grid: while services using the network may operate according to competitive principles, the owner of the network is providing an essential service against which there is no meaningful possibility of competition.

1.8 This has left Australia with a broadband service which is slow and expensive when benchmarked against comparable OECD countries, one in which metropolitan customers may be well served while those in regional areas experience patchy or non-existent services.

1.9 The interim report correctly identifies the contradictory responsibilities placed on Telstra's directors: on the one hand their fiduciary obligations to act in the interests of shareholders, while at the same time being bound by a range of legislation to provide access services to the very companies it is competing with.

1.10 The solution advanced by the majority of the industry as represented to the Select Committee, was structural separation, whereby the network owner is prohibited from offering downstream retail services.

1.11 Unfortunately, from the outset Telstra has stated that if structural separation is a condition of winning the NBN tender then it will simply refuse to bid.

1.12 On 11 November 2008, Telstra appeared before the Select Committee to express its' views:

> Mr Quilty: The bottom line for us is that we have to act in the interests of our shareholders. We cannot do anything that we do not consider is in the interests of our shareholders. There is no doubt in the mind of Telstra management, and all of the analyst reports concur, that further separation of Telstra is not in our shareholders' interests. We simply cannot contemplate it.

1.13 In addition to outright rejection of any further separation of Telstra's business units, Telstra's 12 page submission to the RFP does not fulfil a number of the Government's core stated objectives:

- Telstra will accept the taxpayer's $4.7 billion stake only as a low interest loan, rather than the Government's preferred option of taking an equity share;
- Telstra has offered to cover 80 – 90 per cent of the population – presumably the most profitable customers - as opposed to the Government's demand for 98 per cent coverage;
- Telstra has demanded a significant weakening of the legislation governing access by competitors and has sought to undermine the role of the ACCC, which has been seen as a transparent attempt to entrench its' advantages of incumbency; and
- Telstra has refused to submit a fully qualified bid until a large number of its conditions are met, leading to a debate as to whether the proposal is even a conforming bid under the RFP guidelines.

1.14 This is the essence of the dilemma faced by the Government, its expert panel and the ACCC as they deliberate over the bids received on November 26. In Telstra's mutation from a public utility into an aggressive, litigious and self-interested private corporation, we have lost effective control over an essential service.

1.15 Many of the pathways forward are fraught with the possibility of complex litigation, delays, continued absence of service in less profitable regional areas, and the expenditure of a vast sum of public money on the further entrenchment of Telstra's dominant market position, to the exclusive benefit of Telstra shareholders.

1.16 Commenting on the extraordinarily expensive end-user pricing model sketched in Telstra's submission to the RFP, Mr Terry McCrann noted:

> Telstra unintentionally did us all a service. It has laid out exactly how it proposes to migrate its monopoly to the new broadband platform; and what we will pay as a consequence. There is no way any responsible government could lock in such a future.[1]

Remembering the objective: the people who will use the network

1.17 The Government's objectives for the NBN project include the establishment of a network that "continues to promote the long-term interests of end-users".

1.18 While buried about half-way down the list of RFP objectives, this objective is really the primary goal of the whole exercise. It is worth noting in passing that in a debate dominated by technology, principles of competition and rates of return, discussion of the welfare of the human beings for whom the network is designed have been almost entirely subordinated. Who will use the network? What will they use it for? Will it improve peoples' lives? Will it be affordable and accessible, will it promote social inclusion or alienation, will it act to reduce social inequality or entrench it? How will it contribute to the overarching public policy goals of enabling the transition to a prosperous low carbon economy?

Regional coverage

1.19 Regrettably the RFP did not mandate that the network be 'rolled in' from areas of marginal service rather than 'rolled out' from metropolitan cores where service already exceeds the minimum 12 Mbps benchmark established for the NBN. Telstra has refused to commit to rolling the network in from under-serviced areas, preferring to concentrate on the more lucrative metropolitan markets.

1.20 It will be a travesty if after all this time, the additional injection of $4.7 billion of taxpayers' funds – including the $2 billion formerly quarantined for regional services – should simply entrench the metropolitan/regional telecommunications divide.

Ways forward

1.21 The majority and government interim reports are embellished with a high degree of partisan bitterness, but it is possible to discern one area of substantial

1 http://www.theaustralian.news.com.au/business/story/0,28124,24722089-30538,00.html

agreement across the parties: the current market structure has failed to curb Telstra's monopolistic business practices, which have harmed competition and by extension, users of the network – the public.

1.22 The Australian Greens believe that the funding commitment set aside by the Commonwealth for the NBN creates a unique opportunity to undo some of the harm caused by the privatisation of Telstra, if it restores the public interest as the primary policy objective in delivering broadband services.

1.23 In this regard the Australian Greens urge the Government to hold its nerve with regard to the RFP, and insist on taking a majority equity stake in the National Broadband Network and operating it as a competitively neutral, open-access network.

1.24 Communications expert Mr. Paul Budde reminded the Sydney hearing of the Select Committee that Governments are elected to govern, and that the public interest should always take precedence over corporate interests, particularly where essential services are concerned:

> Unfortunately, we are the only country in the world that has this fantastic, enormous bully of an incumbent telecommunications carrier. No other country in the world has this. Every incumbent tries to protect its monopoly; there is no way around it.
>
> They [Telstra] do not want to sit down, they do not want to find a solution with the rest of the industry. If that is the case, then the only thing we have to do is use that stick. The government has a stick—use the stick.

1.25 The stick, in this case, is $4.7 billion in public funds, and the ability to legislate for a fair market structure that protects the public from the monopolistic practices of the incumbent. The essential backbone of the NBN, paid for by the public, must be retained in public ownership.

Senator Scott Ludlam

…….

Date: December 2008

APPENDIX 1

Terms of Reference

(1) That a select committee, to be known as the Select Committee on the National Broadband Network, be established to inquire into and report by 30 March 2009 on:

(a) the Government's proposal to partner with the private sector to upgrade parts of the existing network to fibre to provide minimum broadband speeds of 12 megabits per second to 98 per cent of Australians on an open access basis; and

(b) the implications of the proposed National Broadband Network (NBN) for consumers in terms of:

(i) service availability, choice and costs,

(ii) competition in telecommunications and broadband services, and

(iii) likely consequences for national productivity, investment, economic growth, cost of living and social capital.

(2) That the committee's investigation include, but not be limited to:

(a) the availability, price, level of innovation and service characteristics of broadband products presently available, the extent to which those services are delivered by established and emerging providers, the likely future improvements in broadband services (including the prospects of private investment in fibre, wireless or other access networks) and the need for this government intervention in the market;

(b) the effects on the availability, price, choice, level of innovation and service characteristics of broadband products if the NBN proceeds;

(c) the extent of demand for currently available broadband services, what factors influence consumer choice for broadband products and the effect on demand if the Government's fibre-to-the-node (FTTN) proposal proceeds;

(d) what technical, economic, commercial, regulatory and social barriers may impede the attainment of the Government's stated goal for broadband availability and performance;

(e) the appropriate public policy goals for communications in Australia and the nature of regulatory settings that are needed, if FTTN or fibre-to-the-premise (FTTP), to continue to develop competitive market conditions, improved services, lower prices and innovation given the likely natural monopoly characteristics and longevity of the proposed network architecture;

(f) the possible implications for competition, consumer choice, prices, the need for public funding, private investment, national productivity, if the Government does not create appropriate regulatory settings for the NBN;
(g) the role of government and its relationship with the private sector and existing private investment in the telecommunications sector;
(h) the effect of the NBN proposal on existing property or contractual rights of competitors, supplier and other industry participants and the exposure to claims for compensation;
(i) the effect of the proposed NBN on the delivery of Universal Service Obligations services;
(j) whether, and if so to what extent, the former Government's OPEL initiative would have assisted making higher speed and more affordable broadband services to areas under-serviced by the private sector; and
(k) the cost estimates on which the Government has based its policy settings for a NBN, how those cost estimates were derived, and whether they are robust and comprehensive.

(3) That, in carrying out this inquiry, the committee will:
(a) expressly seek the input of the telecommunications industry, industry analysts, consumer advocates, broadband users and service providers;
(b) request formal submissions that directly respond to the terms of reference from the Australian Competition and Consumer Commission, the Productivity Commission, Infrastructure Australia, the Department of the Treasury, the Department of Finance and Deregulation, and the Department of Infrastructure, Transport, Regional Development and Local Government;
(c) invite contributions from organisations and individuals with expertise in:
(i) public policy formulation and evaluation,
(ii) technical considerations including network architecture, interconnection and emerging technology,
(iii) regulatory framework, open access, competition and pricing practice,
(iv) private sector telecommunications retail and wholesale business including business case analysis and price and demand sensitivities,
(v) contemporary broadband investment, law and finance,
(vi) network operation, technical options and functionality of the ‘last mile' link to premises, and
(vii) relevant and comparative international experiences and insights applicable to the Australian context;

(d) advertise for submissions from members of the public and to the fullest extent possible, conduct hearings and receive evidence in a manner that is open and transparent to the public; and

(e) recognise the Government's NBN proposal represents a significant public sector intervention into an increasingly important area of private sector activity and that the market is seeking openness, certainty and transparency in the public policy deliberations.

(4) That the committee consist of 7 senators, 2 nominated by the Leader of the Government in the Senate, 4 nominated by the Leader of the Opposition in the Senate, and 1 nominated by any minority party or independent senators.

(5) (a) On the nominations of the Leader of the Government in the Senate, the Leader of the Opposition in the Senate and any minority party and independent senators, participating members may be appointed to the committee;

(b) participating members may participate in hearings of evidence and deliberations of the committee, and have all the rights of members of the committee, but may not vote on any questions before the committee; and

(c) a participating member shall be taken to be a member of the committee for the purpose of forming a quorum of the committee if a majority of members of the committee is not present.

(6) That the committee may proceed to the dispatch of business notwithstanding that all members have not been duly nominated and appointed and notwithstanding any vacancy.

(7) That the committee elect as chair one of the members nominated by the Leader of the Opposition in the Senate.

(8) That the chair of the committee may, from time to time, appoint another member of the committee to be the deputy chair of the committee, and that the member so appointed act as chair of the committee at any time when there is no chair or the chair is not present at a meeting of the committee.

(9) That, in the event of an equally divided vote, the chair, or the deputy chair when acting as chair, have a casting vote.

(10) That the committee have power to appoint subcommittees consisting of 3 or more of its members, and to refer to any such subcommittee any of the matters which the committee is empowered to examine.

(11) That the committee and any subcommittee have power to send for and examine persons and documents, to move from place to place, to sit in public or

in private, notwithstanding any prorogation of the Parliament or dissolution of the House of Representatives, and have leave to report from time to time its proceedings and the evidence taken and such interim recommendations as it may deem fit.

(12) That the committee be provided with all necessary staff, facilities and resources and be empowered to appoint persons with specialist knowledge for the purposes of the committee with the approval of the President.

(13) That the committee be empowered to print from day to day such papers and evidence as may be ordered by it, and a daily Hansard be published of such proceedings as take place in public.

APPENDIX 2

Commonwealth's Objectives for the National Broadband Network

The evaluation criteria in clause 10.3 include the extent to which the Proposal meets the Commonwealth's objectives for the NBN project. The Commonwealth's objectives for the NBN project are to establish a national broadband network that:

1. covers 98 per cent of Australian homes and businesses;
2. is able to offer broadband services with a minimum 12 Mbps dedicated downlink transmission speed over each connection provided to a premises;
3. supports symmetric applications such as high-definition video-conferencing;
4. is able to support high quality voice, data and video services;
5. uses fibre-to-the-node or fibre-to-the-premises network architecture;
6. enables uniform retail prices on a national basis;
7. is rolled out and made operational progressively over five years from the date of execution of a contract between the Commonwealth and successful Proponent;
8. continues to promote the long-term interests of end-users;
9. has sufficient capacity to meet current and foreseeable demand and has a specified upgrade path within clear timeframes, consistent with international trends;
10. facilitates competition through open access arrangements that ensure equivalence of price and non-price terms and conditions, and provide scope for access seekers to differentiate their product offerings;
11. enables low access prices that reflect underlying costs while allowing Proponents to earn a rate of return on their investment commensurate with the risk of the project;
12. provides benefits to consumers by providing choice to run applications, use services and connect devices at affordable prices;
13. provides the Commonwealth with a return on its investment of up to $4.7 billion;
14. is compatible with the Government's related Fibre Connections to Schools initiative;
15. meets Government requirements for the protection of Australia's critical infrastructure;

16. is consistent with national security, e-security and e-safety policy objectives including compliance with laws relating to law enforcement assistance and emergency call services;
17. is consistent with Australia's international obligations; and
18. facilitates opportunities for Australian and New Zealand small and medium enterprises (SMEs) to provide goods and services to the project.

National Broadband Network Evaluation Criteria

The evaluation process is outlined at section 10 of this RFP. Within the framework of an overarching value-for-money assessment, the evaluation criteria against which Proposals will be assessed are:

1. the extent to which the Proposal meets the Commonwealth's objectives for the NBN project (as set out in clause 1.3);
2. the capacity of the Proponent to roll-out, maintain, upgrade and operate the network;
3. the nature, scope and impact of any legislative and/or regulatory changes that are necessary to facilitate the Proposal;
4. the cost to the Commonwealth of the Proposal;
5. the acceptability to the Commonwealth of the contract terms and conditions proposed by the Proponent and the extent to which the Proposal departs from the Commonwealth's notified commercial terms (if any); and
6. the extent of the Proponent's compliance with the RFP.

The criteria are not listed in order of importance. Subject to clauses 10.4 to 10.9, the Panel will evaluate each Proposal against each of these criteria and then undertake a comparative assessment of all Proposals in order to make a recommendation to the Minister for Broadband, Communications and the Digital Economy ('the Minister') as to which Proposal(s) offer the best overall value for money to the Commonwealth. The Minister, following consultation with Cabinet, will be the final decision maker.

APPENDIX 3

Submissions Received

Submission No.	Submitter
001	Paul Budde Communication
002	WA Department of Industry and Resources
003	iiNet Ltd
004	AAPT
005	QLD Government
006	Internet Society of Australia
007	Australian Telecommunications Users Group Ltd
008	Competitive Carriers Coalition
008a	Competitive Carriers Coalition
008b	Competitive Carriers Coalition
008c	Competitive Carriers Coalition
008d	Competitive Carriers Coalition
008e	Competitive Carriers Coalition
008f	Competitive Carriers Coalition
008g	Competitive Carriers Coalition
009	Vodafone Australia
010	Australian Federation of Deaf Societies
010	Australian Communication Exchange
011	Infrastructure Partnerships Australia
012	Terria Ltd
013	Swinburne University
014	Mr Doug McArthur
015	Melbourne Business School – Centre for Ideas and the Economy
016	AUSTAR United Communications Ltd
017	Chamber of Commerce and Industry WA
018	Digital Tasmania
019	Optus
020	Primus Telecom

021	Mr Gregory Schiemer
022	Mr Kevin Morgan
023	Electronic Frontiers Australia
024	Mr Ross Kelso
025	Adam Internet
026	Torres Shire Council
027	Northern Territory Government
028	Consumers' Telecommunication Network
029	Google
030	GetUp!
031	Communications Experts Group Pty Ltd
031a	Communications Experts Group Pty Ltd
032	Australian Industry Group
033	Axia NetMedia

APPENDIX 4

Witnesses Who Appeared Before the Committee

Sydney, Tuesday 7 October 2008

BREALEY, Mr Michael, Manager, Public Policy
Vodafone Australia

BUDDE, Mr Paul, Managing Director
Paul Budde Communication Pty Ltd

CHAPMAN, Mr Alexander, Executive Officer, Policy and Strategy Coordinator
Australian Federation of Deaf Societies

CORBIN, Ms Teresa, Chief Executive Officer
Consumers Telecommunications Network

HICKS, Mr Gregory, Chairman
Adam Internet Pty Ltd

POOLMAN, Mr Clive, General Manager Strategy
AAPT

SCHUBERT, Ms Georgia Kate, General Manager, Public Policy
Vodafone Australia

WALTERS, Ms Sheena, Manager, Interpreting and Advocacy
Deaf Society of New South Wales

WEIR, Ms Deanne, Group Director, Corporate Development and Legal Affairs
AUSTAR United Communications Ltd

Canberra, Wednesday 8 October 2008

COBCROFT, Mr Simon, Acting Assistant Secretary, Broadband Infrastructure Branch
Department of Broadband, Communications and the Digital Economy

COSGRAVE, Mr Michael, Group General Manager, Communications Group
Australian Competition and Consumer Commission

DIMASI, Mr Joe, Executive General Manager, Regulatory Affairs Division
Australian Competition and Consumer Commission

EGAN, Hon. Michael Rueben, Chairman
Terria Pty Ltd

FORMAN, Mr David, Executive Director
Competitive Carriers Coalition

HEALY, Mr Matthew, Chair
Competitive Carriers Coalition

KING, Ms Marianne, Assistant Secretary, National Broadband Network Taskforce
Department of Broadband, Communications and the Digital Economy

LYON, Mr Brendan Curtis, Executive Director
Infrastructure Partnerships Australia

LYONS, Mr Colin, Deputy Secretary, National Broadband Network Taskforce
Department of Broadband, Communications and the Digital Economy

SIMMONS, Mr Michael John, Managing Director
Terria Pty Ltd.

WAGG, Dr Michael, General Manager, Networks Strategy
Terria Pty Ltd.

WINDEYER, Mr Richard, Acting First Assistant Secretary, National Broadband Network Taskforce
Department of Broadband, Communications and the Digital Economy

Melbourne, 28 October 2008

BARR, Professor Trevor Frank, Media and Telecommunications
Swinburne University of Technology

BHATIA, Mr Ravi, Chief Executive Officer
Primus Telecom

CONNOR, Mr Andrew, Spokesperson
Digital Tasmania

GANS, Professor Joshua
Private capacity

HORAN, Mr John, Regulatory and Legal Counsel
Primus Telecom.

KRISHNAPILLAI, Mr Maha, Director, Government and Corporate Affairs
Optus

MORGAN, Mr Kevin Leonard
Private capacity

RAICHE, Ms Holly, Executive Director
Internet Society of Australia

SHERIDAN, Mr Andrew, General Manager, Economic Regulation
Optus

SINCLAIR, Ms Rosemary Anne, Managing Director
Australian Telecommunications Users Group

WHITE, Mr Gerry, Director
Internet Society of Australia

Perth, Thursday 6 November 2008

BAIN, Mr Martin, Member and Representative
Chamber of Commerce and Industry Western Australia

BUCKINGHAM, Mr David, Chief Financial Officer
iiNet Ltd

CHENG, Mr Anson, Manager, Broadband Infrastructure
Western Australian Department of Industry and Resources

DALBY, Mr Stephen, Chief Regulatory Officer
iiNet Ltd

de JONG, Mrs Julie, Director for Innovative Industries
Western Australian Department of Industry and Resources

DIGNARD, Mrs Sharon Anne, Senior Adviser Industry Policy
Chamber of Commerce and Industry Western Australia

FRONTINO, Mr Anthony, Managing Director
CipherTel Pty Ltd

GREEN, Professor Walter Battman, Director
Communications Experts Group Pty Ltd

GROCOTT, Mr Stephen, General Manager, ICT, Biotechnology and Trade Services, Western Australian Department of Industry and Resources

HAILES, Ms Allison, Executive Manager
Western Australian Local Government Association

HILL, Mr Christopher Richard, Member and Representative
Chamber of Commerce and Industry Western Australia

MALONE, Mr Michael, Managing Director
iiNet Ltd

McGUIGAN, Mr Philip
Western Australian Local Government Association

MONKS, Mr Peter, Acting Chief Executive Officer
City of Perth

Canberra, Tuesday 11 November 2008

GALLAGHER, Mr William David, General Counsel, Public Policy & Communications, Telstra Corporation Limited

QUILTY, Mr David, Group Managing Director, Public Policy
Telstra Corporation Limited

WARREN, Dr Tony, Executive Director, Regulatory Affairs
Telstra Corporation Limited

Brisbane, Friday 21 November 2008

CHELLEW, Ms Linda, Manager
Indigenous Remote Communications Association

CLAPPERTON, Mr Dale, Spokesperson
Electronic Frontiers Australia Inc

JACKSON, Mr David Gavin, Manager, Economic Development
Brisbane City Council

KELSO, Dr Ross
Private capacity

McCARTHY, Mr Bernie, Chief Executive Officer
Torres Shire Council

STEPHEN, Councillor Pedro, Mayor
Torres Shire Council

SUZOR, Mr Nicolas, Vice Chair
Electronic Frontiers Australia Inc

Canberra, Monday 24 November 2008

PRICE, Mr Arthur R (Art), Chairman and Chief Executive Officer
Axia NetMedia Corporation