PRRES Conference Paper

The 17th Annual Conference for the Pacific Rim Real Estate Society 16 – 19 January 2011, Gold Coast, Australia

Property, planning and purpose: Legal concerns facing broadband roll out in Australia

Lucy Cradduck

ABSTRACT

The Australian government, and opposition, are committed to facilitating high-speed broadband provision. In April 2009 the (then) Labor government announced a proposal to facilitate provision by mandating "...the use of fibre optic infrastructure ... in greenfield estates" Separately, the installation of (usually overhead) cables commenced in select brownfield areas throughout Australia. In the lead up to the 2010 federal election, the broadband policy focus of the (then) federal opposition was to enabling private investment rather than direct investment by government itself.

High-speed broadband is essential for Australia's economic future. Whether implementation is undertaken by government, government owned corporations or private investors, will impact on the processes to be followed. Who does what, also will determine the rights available to land owners. The next stage, of necessity, will involve the establishment of procedures to require the retrofitting of existing urban environments. This clearly will have major property, property rights and valuation impacts.

As Horan (2000) observed "...preserving... unique characteristics ... of...regions requires a compromise between economic ambitions and social, cultural, and environmental values". The uncertainty following the federal election, and the influence of independants with individual agendas; presents unique challenges for broadband implementation. This paper seeks to identify the processes to be followed by various potential broadband investors as they work to establish a ubiquitous network. It overviews current legislative regimes and examines concerns raised by stakeholders in various government reviews. It concludes by plotting a clear way forward to the future, with particular regard to property rights and usage.

KEY WORDS Broadband; Greenfield estates; Brownfield sites; Property rights

Contact details

Lucy Cradduck Lecturer Property Law, University of the Sunshine Coast SJD Candidate, Law Faculty, QUT

C/- Faculty of Business, University of the Sunshine Coast, Maroochydore DC 4558 cradduck@usc.edu.au

1. INTRODUCTION

In his book "Etopia" Mitchell (1999) considered the impact of the "all-encompassing digital system" on urban infrastructure. He identified the need to "...reinvent public places...for the 21st Century that build on the advantages that electronic communication brings [which] also satisfies the human need for meeting and relationships." (Mitchell, 1999) Of considerable importance for this "digital system" is broadband networks as these enable faster and more efficient access to the Internet and its services; the desire for which will be a key driver for broadband's deployment. (Bouras et al, 2009, p. 795)

In the lead up to the 2007 Australian federal election, the Australian Labor Party ('ALP') announced a commitment to invest up to \$4.7 billion to roll-out a high speed broadband network over a period of five years. (ALP, 2007) Subsequently, the ALP government confirmed its intention to build a "national high-speed broadband fibre-to-the-node network" (Conroy, 2007) that is now referred to as the Australian National Broadband Network ('NBN'). (Conroy, 2009) Conversely, in the lead up to the 2010 federal election, the broadband policy focus of the Coalition opposition was to enabling private investment rather than direct investment by government itself. (Coalition, 2010) The negotiations with the independent members leading to the formation an ALP minority government will immediately impact on broadband provision throughout Australia.

The 2010 election result, although arguably politicizing broadband, clearly indicates that high speed broadband is seen as being essential for Australia's future. Separately from the federal government's initiative, many telecommunications companies are working to expand their broadband service provision throughout Australia. How and what is provided will depend on location, demand and capacity. Delivery may be by one, or a combination, of a variety of methods including fibre optic cable, satellite and/or wireless delivery. The infrastructure involved in delivery will include towers, ducts, cables and satellite dishes. How what is to be delivered, will be delivered, will depend upon the various regimes regulating land and infrastructure access; and telecommunications access generally. The ability to grant access to land by means of the grant of an easement is identified, however, in the context of the analysis undertaken does not form a central part of that analysis.

The paper is structured as follows - Part 2 considers broadband in Australia by identifying what the term 'broadband' means and why it is important. Part 3 overviews the current land and telecommunications facilities access regimes; as well as considering the proposed NBN access regime. It identifies what access is granted to; to whom access is available; and, for some matters, at whose cost. Part 4 considers various stakeholder concerns raised in response to the Greenfields Consultation Paper ('GCP') (DBCDE, 2009b). It focuses on concerns raised to questions that will impact on development process and thus property planning, rights and usage. Part 5 provides guidance as to how issues raised may be addressed into the future. The paper concludes in Part 6 with some final observations.

2. BROADBAND IN AUSTRALIA

Section 51(v) of the Commonwealth Constitution grants exclusive power to the federal government to legislate with respect to "postal, telegraphic, telephonic, and other like services". The High Court has interpreted this power to include responsibility for a wide range of radio and television broadcasting and services. Brislan (1935) – broadcasting by wireless was held to be telephonic; Herald (1906) – section 51(v) was held to extend to radio and television broadcasting; Jones v Cth No. 2 (1965) – television programmes and their provision were held to be covered by Section 51(v))

The regulation of telecommunication services and providers within Australia is governed by a variety of legislation. Access to infrastructure, and services, for competitors is managed through declarations made by the Australian Competition and Consumer Commission under Part XIC of the TPA. Regulation of broadband services, being an "other like service" (Chin, 2000, 25) is the responsibility of the federal government.

The OECD (2001) proposed that, to be considered to be broadband, the available service must be of a speed, as relates to downstream access, of at least 256 Kbps. However, there is not one accepted standard or speed by which 'broadband' is defined. (Bouras *et al*, 2009) The term can be "used simply as shorthand for high speed Internet access" (OECD, 2001) thus, most definitions are imprecise and tend to be speed dependent. (OECD, 2003)

In Bayside ((2004) [3]) the High Court identified a "broadband cable network" as one that "uses a wider frequency band than is necessary to transfer speech telephonically. It comprises links between exchanges, between exchanges and a customer's tap-off point, and between a customer's tap-off point and equipment... It permits a flow of information for a number of purposes, including internet services and cable television."

Broadband makes "... the Internet and World Wide Web run faster and jump higher for you and your computer." (Gaskin, 2004, p. 3) Faster and more reliable Internet access will enable consumers to undertake a variety of tasks not previously possible due to lack to reliability and/or speed. (Cole & Lorch, 2003, p. 18) An important feature of broadband, for both consumer and business access to relevant sites, is that the connection is immediate. (Spurge & Roberts, 2005) The desire "... for 'always-on' broadband access networks..." is driven by consumers' wants for the available content and services. (Lovelock & Ure, 2002, p. 359)

In 2008 the Australian Bureau of Statistics ('ABS') defined 'broadband' as "... an 'always on' internet connection with an access speed equal to or greater than 256kbps." (ABS, 2008) This is consistent with the OECD definition but broadband is not merely "a means of rapidly surfing the internet". (Axia, 2008) Broadband has been identified as a "means of promoting citizen access to information" and therefore to government services. (Middleton, 2007) Computer networks and broadband also have an important part to play both in connecting communities and in facilitating education. (Kollock & Smith, 1999, p. 21) This is because broadband improves access to information and enables people to extend, expand and create communities without the need to leave where they are. (Rheingold, 2001, p. 274; Wellman & Guila, 1999)

Broadband internet access enables the creation and sharing of information (Slevin, 2000); and maintaining contact with friends overseas (Quiggan & Potts, 2008). It increases the ease of access to information for health, government and education purposes; (Kollock & Smith, 1999) and provides economic benefits to business. (Gaskin, 2004, p. 5) Or, as

Middleton (2007) explains, the benefits of accessing broadband can be categorized as belonging to one of four groups - *societal*, *communal*, *individual or commercial*.

Metcalfe's law provides that "... the value of a network grows with the square of the number of members." (Murdoch & Anderson, 2007, p. 3) Despite this it remains that of the 22 million plus Australian residents (ABS, 2010) as at June 2010 there was only 9.6 million active internet subscribers. (ABS, 2010a) It may be therefore, as the ALP proposes, what is required are the construction of one network and one wholesale provider of access to that one network. However, the reality is the Australian telecommunications industry currently includes a variety of participants and service providers, (Glasson Report, 2008, p. 122) many of whom are independently creating their own networks. The main provider is the formerly publicly owned Telstra Corporation Limited.

3. CURRENT ACCESS REGIMES

The available infrastructure ranges from the 'old', i.e. copper cables and land telephone lines; to the 'new', i.e. mobile and satellite technology. Delivery of services may require the construction of new infrastructure and/or new means of access to existing infrastructure. Appropriate access therefore is relevant for infrastructure owners, property developers, content and service providers, and consumers. This relates to access for construction purposes; and access to existing facilities for service provision.

As a consequence of the system of land grants prior to federation, the granting of land title; and the regulation of land ownership and use rests primarily with the individual States, with responsibility for commonwealth land only remaining with the Federal government. Generally, regulation of real property, ownership issues and property use, i.e. regarding town planning, remains within the purview of the respective State and Territory governments. (Radio Coffs Harbour ((1986) 56-7) Oversight of planning schemes generally is delegated to Local Government Authorities ('LGA'. (i.e. Chapter 3, SPA) This results in a variety of property and land use laws and schemes within the States themselves and Australia as a whole, with a mix of common law rules and legislation.

The division of Constitutional power between the federal and State/Territory governments could adversely affect rollout of the NBN. (Davis, 1998, p. 148) Idiosyncrasies of the various State/Territory regimes will need to be resolved as part of the implementation process. The focus of the paper is on the federal laws only. These are considered in respect of access generally for a 'public purpose'; for telecommunications purposes specifically; and then as previously proposed for the NBN. It is noted that, as unenacted Bills will need to be reintroduced to Parliament, proposed sections may be changed. At the time of writing this paper, any such changes are not identifiable.

a. For a 'public purpose'

In order to select land for any use, it is necessary to undertaken inspections of prospective sites prior to making a determination of acquisition. If the inspection and/or prospective acquisition of land is to be by a Commonwealth department or authority, the *access regime* in Part III of the LAA is utilised. Whilst the LAA does not specify any objects, it was implemented to address deficiencies in the previous system of acquisition of land by the Commonwealth. (Fife, 1988) Prior to acquisition, the LAA grants the right to access the land for inspection purposes. That right is subject to Section 9 which requires 7 days written notice be given prior to access. Section 10 enables access, including to adjoining

land, by 'authorised persons' (Section 7) for the purpose of determining whether the land is suitable for a 'public purpose'. Section 6 provides that a "public purpose means a purpose in respect of which the [federal] Parliament has power to make laws..."

Section 22(2) provides that if land is to be acquired, a declaration of acquisition must be provided. It is a constitutional requirement that a declaration must clearly state the public purpose/s for which the land is being acquired. (Leppington ([1990] at [17]) In the case of broadband this would be for 'telecommunications' provision in reliance upon the power in Section 51(v) of the Constitution. Once a declaration is made, and provided it is not defective, (Jones v The Cth No. 1 [1963] (although defects may be remedied by reference to specific legislation (Jones v The Cth No. 2 [1965])) it is conclusive evidence as to the public purpose. (Blakely (1953)) That purpose "...although expressed in the singular, might well be multi-faceted..." (Sydney v Walker, [2005] [39]) and may therefore encompass a variety of needs.

If land is to be acquired, for example to facilitate the roll out of the NBN, this also requires a policy determination by the federal government. The Full Court in SA v Slipper ([2003]) held that a decision to acquire land must take into account 'broad policy issues', separate from a consideration of issues of compensation payable. As Selway J observed"...the resolution of those broad policy issues may dictate what land should be acquired. [However i]t is no longer the case that such considerations exclude the obligation to provide natural justice...." ((SA v Slipper [2003]) [23]) If a determination is made that land will be acquired, the procedures in Part VI must be followed. This includes the requirement for payment of compensation on 'just terms' to affected parties, (Section 93, LAA) and that matters required to be considered are appropriately considered.

Access to, including temporary occupancy of, adjoining land is permitted for the purpose of undertaking any construction and maintenance works to the acquired land. (Sections 11-14, LAA) This temporary occupation must cause as little disruption or damage to the adjoining land. (Section 13, LAA) It does not however constitute an acquisition for compensation purposes and thus is not a trigger for the payment of compensation to any adjoining owner or occupier. (Section 15, LAA)

If the proposed acquisition is to be by NBN Co Limited then the LAA access regime would not apply. Similarly, if any other (non-government) entity wished to acquire land for similar purposes, the provisions of the LAA would not apply. This is because as public companies they are specifically excluded from the LAA access regime. (Section 6)

b. For telecommunications purposes

Schedule 3 of the TA grants a carrier, (Section 7, TA) being the holder of a 'carrier licence', (Section 7 and 56, TA) certain access rights to land not owned by that carrier. Specifically, carriers are granted the power "...for the purposes of determining whether any land is suitable for its purposes..." to "... enter on, and inspect, the land; and ... do anything on the land that is necessary or desirable for that purpose...". (Div 2, Sch 3, TA)

Access also may be granted for the purposes of installing or maintaining a facility; (Div. 3, Sch. 3, TA) or enabling access for use of the facility by a competitor. (Sch 1, TA) The later is known as the 'facilities access regime' ('FAR'). The FAR operates independently of the TPA but, together with the TPA; the TA provides a regulatory framework that is designed to promote "the efficiency and international competitiveness of the Australian telecommunications industry". (Section 3, TA)

The FAR requires that access must be provided to facilities to enable competition for carriage services, and competitors to work to establish their own facilities. (Clause 16, Sch 1, TA) 'Facility' refers to the infrastructure and other 'parts' of a telecommunications network. (Section 7, TA) The term includes "...land on which a facility...is located; or ... a building or structure on land..." (Clause 17(5), Sch 1, TA) The FAR extends to require that access be provided to tower surrounds, and underground ducts. (Clause 30, Sch 1, TA)

The FAR is geared specifically to promoting the rights of carriage service providers. The power to gain access in order to install or maintain a facility is subject to the obligation to take steps to minimise inconvenience and damage; (Clause 8, Sch 3, TA) and to restore the land once access is no longer required. (Clause 9, Sch 3, TA) Exercise of the access power is subject to strict compliance with notice requirement provisions (Clauses 17, 18 & 19, Sch 3, TA); and to the payment of compensation for any "financial loss or damage" caused by a carrier (Clause 42, Sch 3, TA). Low impact facilities, once designated as such (Clause 6(3), Sch. 3, TA) importantly are not subject to State planning regimes. (Clause 37, Sch 3, TA)

c. Proposed for high speed broadband purposes

Currently, and separately from the power in the LAA for the Commonwealth to acquire land for a 'public purpose', there is no specific provision dealing with either the acquisition of land for telecommunications purposes or the amount of compensation that is payable. However, the ALP government's previously legislative package (which lapsed when the last session of federal Parliament was prorogued with the calling of the 2010 election), reinforced that if land is required to be acquired as a consequence of the new telecommunications access regime, then the acquisition must be on just terms. (Proposed Section 152ELD TPA)

The TCPSSB also provides for the commencement of proceedings where there is a dispute as to the amount of compensation payable. Interesting it does not specify who the acquiring party will be but provides that it is the "...Commonwealth [that] is liable to pay ...compensation..." (Proposed Section 152ELD(1) TPA)

An integral part of the NBN's implementation is the roll-out of fibre optic cables, and construction of related infrastructure. For greenfield sites, this obligation primarily is to be imposed on the developer. (Proposed Part 20A TA, to be inserted by Item 10 TLAFDB) In respect of new developments, the TLAFDB, if re-introduced and enacted, will introduce a new regime for all new developments.

The TLAFDB was to require the construction of optic fibre ready homes for developments obtaining planning approval after 1 July 2010. (Clause 2, TLAFDB) It does this by giving the Minister the power to make instruments specifying areas or types of development for which optical fibre is mandated, (Proposed Section 372A, TA) subject to (as yet) unspecified exemptions. (Proposed Section 372B(5), TA) The legislation will capture new developments irrespective of whether the resulting freehold or leasehold lots (Proposed Section 372D(1)(b)(i), TA)

Generally, it was proposed that, as regards existing lots, responsibility for rollout would be for the NBN Co Limited to achieve. Redevelopment sites however are not included in this responsibility. Proposed Part 20A will impose the same obligations for redevelopment of brown field and infill sites as it does for greenfield sites and will apply equally to unit developments as it does to land subdivisions. (Proposed Section 372D(5) TA) The construction of building units on an existing lot, irrespective of whether subdivision of the land (as opposed to merely the issuing of lots in a community title scheme once building

construction is complete) is required, also may impose similar obligations on the developer. (Proposed Section 372D(1)(b)(ii))

The most recent ALP government proposal was that from 1 January 2011 the NBN Co Limited would be the "...wholesaler provider of last resort in new developments ...within, or adjacent to, NBN Co's long term fibre footprint." (DBCDE, 2010) Some costs will be paid by NBN Co Limited who will own the network. However, costs of trenching and ducting are to be paid by the land developer. (DBCDE, 2010)

Obligations also were to be imposed on parties other than developers by extending the groups which are deemed to be a 'section of the telecommunications industry'. (Section 110(2) TA) The extension was to include the installers of "optical fibre lines" and/or the facilities to be used in conjunction with those lines. (Proposed Section 110(2)(j) TA) The ALP government anticipated changes will be required to State planning regimes but, in any event, the TLAFDB was designed to operate without any "complementary state and territory laws". (DBCDE, 2009, 2)

d. Access overview

The roll-out of high speed broadband in Australia may require that areas of land be acquired, or adjoining land accessed, in order for related infrastructure to be constructed. This construction may be by either the Commonwealth, through one of the federal government departments or authorities; and/or by the NBN Co Limited directly; and/or by non-government owned corporations. If land needs to be acquired, prior to its acquisition, it will be necessary to determine what land is suitable for construction of any necessary infrastructure or roll-out of the fibre optic cables. This will mean that interested parties must be able to inspect that land.

Depending on how the infrastructure is constructed, a determination will need to be made as to whether land needs to be acquired for a 'public purpose'. If the party inspecting is a private investor then, unless any further laws are developed, normal State specific conveyancing and planning procedures will need to be followed. An alternative may be for new public utility easements to be granted to enable the laying of cables under, or over, land by network creators. These easements may or may not utilise existing ducts and conduits. Irrespective however, new easement documents would need to be registered with the relevant Titles Office. (i.e. Section 89(2)(a)(iii) LTA and Section 369(2)(c) LA) Granting easements will present ongoing issues for land use and property rights. Specific access rights may need to be obtained or proscribed under legislation, for inspection, construction and maintenance purposes.

As the creation of public utility easements, for telecommunication purposes or otherwise, is effected under State land legislation this will mean ensuring consistent application of easement conditions nationally. As such, for future planning and land development needs, appropriate terms for broadband easements will need to be considered and determined. To facilitate this process consultation with the telecommunications industry; community groups; Local Government Authorities; and, perhaps most important of all, the property developers and the property industry, will be required. In any event, issues of ongoing access for maintenance, improvement and for access to buildings and towers for related purposes will require industry input to ensure that they are appropriately addressed.

4. STAKEHOLDER CONCERNS

Before, and since, the ALP government announced the NBN there have been a variety of government reviews relevant to the NBN. Appreciating that property concerns were raised in respect of many reviews, the paper focuses on the GCP and the stakeholder submissions to it, because it was specifically concerned with property issues. It is noted that there were to direct consultations with industry and other peak bodies (Mason, 2009) however the author does not have access to that material.

A significant limitation of the submission process was that the due date for receipt of submissions, 12 June 2009, was a mere 14 days after it was emailed to interested parties. As a consequence, only 75 parties made written submissions, some very detailed, others a mere page. The submissions were from a variety of industries as well as individuals.

The GCP sought input from interested parties to 36 questions. These questions were comprehensive in that they sought feedback on a variety of issues including the appropriate role for government in broadband delivery; the best legislative vehicle for facilitating rollout; the appropriate level of interaction between the various echelons of government in respect of planning issues; the obligations (if any) that should be placed on developers and builders as part of the implementation process; and how to address potential competition issues for the broadband service market once the NBN was completed. (DBCDE, 2009b)

Whilst submissions generally were in response to the specific questions raised by the GCP, not all responses were structured to identify the question being answered. Many submissions were not made in response to any question. In some respects identifying the relevant response was easy as numbering consistent with the consultation questions was used. In others, the responses were given holistically as well as by number references and in still others no response was provided. Some submissions were not able to be opened due to their format.

The questions examined were -

- 1 What are the relative merits of the models outlined? Which is the preferable approach? Why?
- 9 What is the appropriate number of lots of premises required for a development to qualify as a greenfield development requiring FTTP?
- 15 What exemption arrangements, if any, would be appropriate and how should they be administered?
- 27 Should it be mandatory that new FTTP networks in greenfield estates after 1 July 2010 be wholesale-only networks? If introduced, should there be exceptions to this type of rule and if so how should they be administered?

After analyzing the responses, the challenges can be grouped as stemming from one of the following - lack of an appropriate definition of 'greenfield estate' and/or planning issues. Question 9 is relevant to the issue of what is an appropriate definition of a greenfield estate, as opposed to a brownfield or infill site. Questions 1, 15 and 27 are relevant to issues relating to planning, as are some of the responses to Question 9 that were made as additional comments or, due to the structure of the response as a whole, appear to the author to best be located there.

a. Lack of an appropriate definition

An important part of fully understanding the impact of the ALP government's proposal for 'greenfield estates' is, clearly identifying what is meant by the term 'greenfield estate' or 'greenfield' (UDIA, 2009). The lack of a clear definition could have implications for implementation and future access rights. Providing a definition is not something that the GCP did, seeking instead input from industry as to an appropriate definition. Question 9 is phrased on the presumption that the number of lots in an estate is somehow relevant to whether or not high speed broadband should be treated as a utility.

i. Responses to Consultation Paper

Approximately 13 submitters considered that there should be no minimum number of lots as part of any definition. The data however is not conclusive as 22 provided no response, and approximately eight considered the issue required more consideration, or they required further information, before responding. Others consider a starting point being developments of three plus (NECA, 2009); five plus (Adelaide, 2009); ten plus or 2,000 sqm of lettable floor space (Aurecon, 2009); or 20 plus for infill areas (CGG, 2009).

Approximately seven, directly or by reference, considered that in formulating a definition it was necessary to link to economic factors, in particular to ensure that the benefits outweighed the costs. (Ergon, 2009) More practical perhaps were the suggestions that an appropriate definition is one that locates the estate within a realistic distance of existing serviced NBN communities (Telstra, 2009) or relevant infrastructure (Landcorp, 2009); or by reference as to whether it is necessary to construct a road access (BCC, 2009).

It is suggested that the responses most relevant to an acceptable definition are ones that relate to the current status of the land itself – i.e. as to whether there is already a "...dwelling house or premises..." constructed upon it (FTTP OAO, 2009); or "...where development can take place unfettered by earlier building..."(MBA, 2009)

ii. Previous 'definitions'

Even amongst authors and practitioners there is some confusion as some use the term "greenfield estate" whilst others use the term "greenfield site" instead. Although not having a clear, or fixed, definition; in respect of real property the term "greenfield estate" has a generally accepted academic meaning as referring to land not currently developed, although the use by academic authors and the courts varies. This ranges from referring to a greenfield estate as "a previously undeveloped, virgin landscape setting"; (Porter, 2004 p. 93) to one "where there has never been any building before" (Dobson et al, 2000 p. 38); to being one where the factory built on it was "built from scratch". (Sharpe, 2004, p. 312)

As time can enable nature to recapture brownfield land, i.e. land that was previously developed, to give it an appearance of always having been a "green field", (Griffiths, 1998, p. 4) to claim that a greenfield estate is one that has never had a building, or other works, constructed on it may be inaccurate and unreliable. Other authors identify land as being greenfield estate by reference to its development potential. These include "residential neighbourhood generally established on land not previously used for urban construction" established either at a city perimeter or on land "earmarked for urban renewal"." (Gollagher, 2007) Yet others identify a greenfield estate as one created by the destruction of previously existing residential development; (Davis, 1992, p. 230); or as undeveloped land on the "periphery of an existing built-up area." (Saunier & Meganck, 2009, p. 161)

The term also is one that is subject to frequent use by the Courts, although most often without elucidation or specific definition. (Springfield (2009) [6]; Spiros (1999) [35]; Hofer (2008) [13]; Keilor (2007) [47]; Smith (2009) [25]; Habitat (2009) p. 12; Kelly's (2003) [5]; Ross Nielson (2007) [8]; Clift (2005) [17]; Aust. Retirement (2007) [3]; Seymour (2002) [45]; Hickey (2005) [51]; Comkey (2005) [2]). In other instances however the Court has gone beyond mere use and has provided, albeit limited, explanations of the term. The Courts explanations include a 'greenfield estate' as "with potential as yet unproven for... development" (Westfield [2007] [34]); absent a "past successful trading history" (Kent (2008) [126]); and "one would need to consider under s.3(1)(b)" VLA (PT Ltd (2006) [419]).

In other cases (Buderim Dev. (2008) [36]; Webster (2008) [119]) the term is used by the Court in the context of the (then) South East Queensland Regional Plan 2005-2026 ('SEQRP 2005'). This provides that "greenfield" means "Areas of undeveloped land in the Urban Footprint suitable for urban development." (SEQRP 2005, Glossary, p. 133) Interestingly, the updated version of the SEQ Regional Plan no longer includes a specific definition of 'greenfield' (SEQRP 2009, p. 155) and only refers to 'greenfield land' by reference to 'broadhectare' land (SEQRP 2009 p. 95), which is not defined. The Queensland Land Supply Strategy (DPI 2008) adopts the SEQRP 2005 meaning.

iii. Suggested definition

The preference of this paper is that an appropriate definition of 'greenfield estate' should not be dependant upon its location, service provision or number of lots provided. It is suggested therefore that the definition the ALP government should adopt as it moves forward is that from Westfield 2007. Namely, that a 'greenfield estate' is any land, irrespective of where located, with an as yet unproven potential for development. Exemptions, if appropriate, should be addressed in planning policies and laws.

b. Planning issues

Although the regulation of land ownership and use rests primarily with the individual States, various federal governments have implemented laws which, whilst not impacting upon land title *per se*, do impact upon land use. These include, for example, environmental protection laws. This has been achieved by means of reliance by the federal government on the external affairs power in the Constitution (Section 51(xxix) and the use of international treaties, (Burgess (1936); Koowarta (1982); Cth v Tas (1983)).

Generally however, regulation of real property, such as ownership issues, and property use, is a State concern (Radio Coffs Harbour (1986) pp. 56-7) with oversight of planning schemes being delegated to LGAs. The result therefore is that there is a mix of federal and state laws which impact upon certain aspects of property rights and land use, with area specific planning regulation.

In order to clearly identify the issues, responses to Questions 1, 15 and 27 are considered separately.

i. Question 1

The Consultation Paper put forward two models for discussion purposes. They were -

"1. the Australian Government could legislate to directly require developers to ensure pit, pipe and FTTP infrastructure and services are available to consumers, or

2. the Australian Government could work with state, territory and local governments to require the installation of FTTP and could support this with legislation to prohibit the installation of non-fibre networks in greenfield estates."

Whilst the government's stated preference was for model 2, the interested parties were not as definite. Of the 71 viewable submissions, only 27 approximately supported model 2 with 13 supported model 1, and the remainder either providing no response, not supporting either; or supporting a combination or variation of the two proposed models, with some going so far as to suggest that either model in isolation from the other would not be fully effective. (FTTH AP, 2009; Calero, 2009)

Yet others supported treating FTTP in the same manner as other utilities. (Engineers, 2009) (It is noted that, as identified above, subsequent ALP government policy statements are consistent with this view. (DBCDE, 2010) BES (2009) supported model 1 but felt model 2 was the preferable operational model. AICTEC (2009) had no preference other than that which ever approach was taken must "...give appropriate consideration to the special needs of educations institutions."

Ultimately, it is suggested that the preferred model should be one that is legislated federally to ensure that across Australia there is consistency of application. (Telstra, 2009) or one in which the lead role is taken by the NBN Co Limited (Optus, 2009; TransAct, 2009) As Ergon (2009) identified that it is likely that a failure to "...adopt...a coordinated approach... will increase the potential for a delay in the 1 July 2010 start date..."

ii. Question 15

Question 15 necessitated a consideration as to what exemptions arrangements, if any, were appropriate. That is - where or why should the proposed greenfield's regimes *not* apply? There was an overwhelming lack of interest to this issue in that 34 submitters made no response whilst others consider that exemptions were not appropriate. Of the remainder 2 considered that there should be broad exemptions (BCC, 2009; CCCLM, 2009) and the balance made specific suggestions as to the types of exemptions necessary.

The suggested exemptions range from enabling exemption in remote areas (CAL, 2009; CEG, 2009; Sanaei, 2009) or where the area is only accessible by wireless or satellite (ATUG, 2009; Internode, 2009); to including those developments where the backhaul costs of connection to the nearest node are prohibitive (ClubCom, 2009; MBA, 2009).

As mentioned early, conditions of current contractual arrangements could impact on a developer's ability to rollout FTTP and therefore an exemption in these circumstances may be appropriate. (TRE Dev., 2009; UDIA, 2009) However an exemption on the basis that "...a developer is planning to provide infrastructure and services over and above that to be provided as part of the NBN..." (DFEEEST, 2009) is, it is suggested, not an appropriate. Nor is the suggestion that States be given flexibility to vary nationally set exemptions. (DPNSW, 2009; Landcorp, 2009; MBA Qld, 2009)

If exemptions are permitted then they must be clearly mandated and applied consistently across Australia. (Telstra, 2009) the suggestion made by CWQRA PDB (2009) that if an exemption was granted there should be a mechanism for noting that exemption on the land title as "...an appropriate mechanism to alert consumers..." is one that government should consider adopting.

Rolling out high speed broadband will impact upon more than just greenfield sites. As yet there is no proposal as to how rollout to brownfield or infill sites is to be managed.

Authors have considered what the technological requirements for buildings would be, and identified these as including fibre-optic connections, facilities for receipt of information, space to enable tenants to install secure systems and under-floor cabling, and the possibility of wireless capabilities. (Kooymans & Flehr, 2000) These requirements clearly differ to what is needed for greenfield estates and specific exemptions for (some) brownfield and infill sites, as part of transitional arrangements, clearly are required.

iii. Question 27

This question was relevant to the proposed manner of operation of the NBN. There was a lack of interest in this issue as 34 respondents failed to respond. Of those that did, 23 answered "yes"; three answered "no"; and four were not sure or responded "not necessarily". Only nine submitters provided specific feedback.

BES (2009) considered that there may be a need for initially for the networks also to be retail. Cisco (2009) noted that an ability to address future needs also must be incorporated in the final structure. CAL (2009) noted the need for integration of whatever is proposed for service provision with the final decision for the manner of deployment of the NBN. Equally important is ensuring that the transition process for carriers can be effected within the stated time frames. (SCRC, 2009; UCG, 2009) Whatever is proposed should not result in duplication of services or resources. (FTTH AP, 2009)

It was suggested that it would be more appropriate to consider this issue as part of the government's response to its legislative review, than as part of its policy process for greenfield estates. (Ergon, 2009) As part of that legislation review, it was identified that issues regarding the Universal Service Obligation also will need to be addressed. (Telstra, 2009; TransAct 2009) Subsequently, the ALP government proposed that, whilst the NBN would be generally operated by NBN Co Limited as a wholesale only network, some flexibility was proposed to enable NBN Co Limited to provide retail services where no other retail provider was available. (DBCDE, 2010)

5. THE WAY FORWARD

The challenges facing greenfield sites, although similar to the issues for infill areas are not the same. In order to ensure that high speed broadband is indeed ubiquitous, what is required are detailed policies and specifications as to what and by when the necessary ducts, cabling and other works are required to be completed for *all* sites. Once there is clarity, it is suggested that policies for greenfield estates, infill areas and brownfield sites should be developed separately, as each will have their own specific issues and as infill areas and brownfield sites may have the capacity to make use of existing infrastructures.

To ensure that appropriate planning is in place, consideration needs to be given to the civil works involved in greenfield development such as the cabling, exchanges, neighbourhood nodes, and the labour to install and run them all. (Clear, 2003, p.128) Many considered that standards, addressing construction and technical issues, as opposed to, or in conjunction with, legislation would be a more appropriate than either of the models proposed. (DBE NTG, 2009; GHD, 2009; SA, 2009; TRE Dev., 2009)

It is hoped that as legislation needs to be reintroduced to parliament that the government takes this opportunity to review these issues to ensure that they are appropriately addressed. As Thompson identifies (2007, p. 330) most issues facing planning today are not new but in the 21st Century have taken "... on a different intensity and emphasis".

...[with] ... the biggest shift lies in the pace of change and our awareness of the complex and interdependent nature of the challenges that confront humankind today."

The choice of the model adopted to be finalized by the new ALP government will directly impact upon the planning laws and thus the process to be followed by developers throughout Australia. It is important that there is consistency of regulation, and that any exemptions are appropriate and workable in order to minimize issues that currently arise due to inconsistency of legislation and processes. (MBA, 2009; DEIWG, 2009)

6. CONCLUSI ON

Whilst virtual space may ultimately take over from the physical, (Crang, 2000, p. 302) there must be some means of accessing the virtual. The Internet does not eliminate distance even as it makes communication over distances easier. (Capling & Nossal, 2001, p. 462) The operation of the Internet has previously been likened to the operation of a super-road network. (Svantesson, 2005, p.41) The issues facing the high speed broadband implementation however are broader than just issues of operation.

In order to achieve a 'super-road' network operational status first the high speed broadband networks must be established and until fully established must work in harmony with the existing networks. However, establishing an appropriate high speed broadband network is important but it is only the first step. Clear, appropriate, and far thinking planning for future expansion, maintenance and use also is required.

To paraphrase Churchill (1924) – we shape our developments and afterwards our developments shape us. As ensuring provision of appropriate high speed broadband infrastructure is a federal government responsibility (Neutze, 1997, p. 179) more thought is required now by the government so that we all will like, and can live with, our 'shape' in the future!

13

¹ Churchill, W (Sir)(1924) Original quote - "We shape our buildings and afterwards our buildings shape us."

REFERENCES

- Australian Bureau of Statistics (2008). *ABS, 8153.0 Internet Activity Survey*. Released 11.30 am 06/04/2009. http://www.abs.gov.au/ausstats/abs@.nsf/mf/8153.0/ (viewed 07/06/2009)
- ABS, (2010) Australian Demographic Statistics, 3101.0 March 2010, released 11.30 am 29 September, 2010
 - http://abs.gov.au/AUSSTATS/abs@.nsf/productsbyCatalogue/FBAC8C9AFBC52291CA2576510 0098272?OpenDocument (viewed 24/11/2010)
- ABS, (2010a) 8153.0 Internet Activity, Australia, June 2010, released 11.30 am 20/09/2010 http://abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/6445F12663006B83CA256A150 079564D?OpenDocument (viewed 24/11/2010)
- Australian Labour Party (2007). New Directions for Communications: A Broadband Future for Australia Building a National Broadband Network. ALP policy statement.
- Axia NetMedia Corporation (2008). Submission to the 'Call for submissions on broadband solutions for remote area' http://www.dbcde.gov.au/consultation and submissions/regional broadband solutions/public submissions on policy and fun ding initiatives to provide enhanced broadband to rural and remote areas/submissions (accessed 17/05/2009)
- Bouras, C., Giannaka, E., & ThrasyvoulosTsiatsos. (2009). Identifying best practices for supporting broadband growth: Methodology and analysis. *J. Network and Computer Applications*, *32*, 795
- Capling, A. & Nossal, K. R. (2001). Death of distance or tyranny of distance? The Internet, detrritorialization, and the anti-globalization movement in Australia. The Pacific R. 14(3), 443
- Chin, G. (2000). Technological Change and the Australian Constitution. [2000] MULR 25
- Clear Advantage & Assocs, (2003). *Broadband Technology Rollout Costing Study*. Report for DCITA http://www.dbcde.gov.au/data/assets/pdf file/0018/20439/Broadband Technology Rollout Costing Study.pdf (accessed 24/06/2009)
- Coalition. (2010) The Coalitions' plan for real action on Broadbnad and Telecommunciations. 10
 August
 2010.
 http://www.liberal.org.au/~/media/Files/Policies%20and%20Media/Infrastructure/Broadband%20and%20Telecommunications%20Policy.ashx (viewed 05/08/2010)
- Cole, R. J., & Lorch, R. (eds) (2003) *Buildings, Culture & Environment: Informing Local & Global Practices.* (Blackwell Publishing Ltd, Oxford)
- Conroy, Hon. S. (2007). *Government committed to FTTN national network*. Ministerial Media Release. http://www.minister.dbcde.gov.au/media/media releases/2007/government committed to fttn national network (viewed 24/09/2009)
- Conroy, Hon. S. (2009). *New National Broadband Network*. Joint Media Release. http://www.minister.dbcde.gov.au/media/media releases/2009/022 (viewed 25/09/2009)
- Conroy, Hon. S. (2009a). *Priority National Broadband Network investment for regional Australia*. Ministerial Media Release. http://www.minister.dbcde.gov.au/media/media-releases/2009/059 (viewed 25/9/2009)
- Crang, M. (2000). Public Space, Urban Space and Electronic Space: Would the Real City Please Stand Up? *Urban Studies*, 37(2), 301
- Davis, M. (1992). City of quartz: excavating the future in Los Angeles. (Vintage Books, New York)
- Davis, G. (1998) Carving out policy space for State government in a federation: The role or coordination. Publius, 28(4) 147
- DBCDE (2010). Australian Government Policy Statements. *DBCDE*, 20 June 2010 http://www.dbcde.qov.au/broadband/national_broadband_network/policy_statements (viewed 22/06/2010)
- DBCDE. (2009) Exposure Draft. *Telecommunications Legislation Amendment (Fibre Deployment)*Bill. Explanatory Memorandum. 23 December 2009

 http://www.dbcde.gov.au/data/assets/pdf file/0011/124121/Exposure draft-
 - Telecommunications Legislation Amendment Fibre Deployment Bill-Explanatory Memorandum.pdf (viewed 07/01/2010)
- DBCDE (2009b). National Broadband Network: Fibre-to-the-premises in greenfield estates,
 Consultation Paper, May 2009
 http://www.dbcde.gov.au/ data/assets/pdf file/0018/112554/Fibre in greenfields consult
 ation paper.pdf (viewed 24/09/2010)
- DPI (2008). Delivering the Queensland Housing Affordability Strategy: Greenfield land supply in South East Queensland. www.dip.qld.gov.au (viewed 29/08/2009)
- Dobson, J., Sander, J., & Woodfield, J. (2000). *Living Geography: Book 1.* (Thomas Nelson & Sons Ltd, Cheltenham)

- Fife, W. Lands Acquisition Bill 1988 Second Reading. House of Representatives Hansard. 20 October 1988, 2044
 - http://parlinfo.aph.qov.au/parlInfo/search/display/display.w3p;adv=yes;db=;group=;holdingType=;id=;orderBy=customrank;page=0;query=Context Phrase%3Abill%3F%20Database%3Achamber%20lands%20acquisition%20Content%3Alands%20Content%3Aacquisition%20Content%3Aact%20Content%3A%22second%20reading%3F%22%20Date%3A01%2F07%2F1988%20%3E%3E%2009%2F07%2F1990%20Dataset%3Aweblastweek,hansardr,noticer,webthisweek,dailyp,votes,voteshistorical,practcer,webhothr,ordersr,members,billslt,billsPrevParl,billsCurBef,billsCurNotBef,tariffs,billsdgs,webdisinsts,webdisinstr;querytype=;rec=1;resCount=Default (viewed 09/07/2010)
- Gaskin, J. E. (2004). The Broadband Bible. (John Wiley & Sons, Inc.)
- Regional Telecommunications Independent Review Committee (2008). *Framework for the Future*. http://www.rtirc.gov.au/Report/RTIRC_Report.pdf (viewed 26/09/2009) ('Glasson Report')
- Given, J. (2008). Australia's Broadband: How big is the problem?. Media Int. Australia, 127
- Gleeson, B., Dong, J., & Low, N. (2007) *Urban Infrastructure* in Thompson, S. (ed.) *Planning Australia: an overview of urban and regional planning.* (Cambridge University Press, Melbourne)
- Gollagher, M. (2007). The Vale Residential Estate: Setting the Stage for Sustainable Stewardship in New Communities. Sustainable Social and Ecosystem Stewardship, International Conference of the Greening of Industry Network June 15-17. Wilfrid Laurier University, Ontario, Canada
- Griffiths, D. G. (1998). Brownfield sites in perspective. in Fox, H. R., Moore, H. M., & McIntosh, A. D. (eds) Land Reclamation: Achieving Sustainable Benefits. (A. A. Balkema Publishers, Rotterdam)
- 'The Habermas Reader', (2000). ed. William Outhwaite (2nd Ed, Policy Press, Cambridge UK)
- Horan, (2000). *Digital Places: Building Our City of Bits.* (Washington, D.C.: ULI the Urban Land Institute)
- Kollock, P., & Smith, M. A. (1999). *Communities in cyberspace* in Smith, M. A. and Kollock, P. (eds) *Communities in Cyberspace*. (Routledge, London)
- Kooymans, R. & Flehr, M. (2000). Arresting the decline in the number of office users in the Adelaide Central Business District. Paper presented at the 6th PRRES Conference, Sydney, New South Wales.
- Lovelock, P. & Ure, J. (2002). *The New Economy: Internet Telecommunications and Electronic Commerce?* in Lievrouw, L. L. & Livingstone, S. (eds) *Handbook of New Media: Social Shaping and Consequences of ICTs*. (Sage Publications, London)
- Mason, P. (2009). 'National Broadband Network: Fibre to the premises in greenfield estates consultation paper', NBN and Fibre Roll-out Regulation Branch, DBCDE. (email)
- Middleton, C. (2007). *Understanding the Benefits of Broadband: Insights for a Broadband Enabled Ontario*. A paper prepared for the Ministry of Government Services, Ontario, Canada. http://www.broadbandresearch.ca/ourresearch/middleton_BB_benefits.pdf (viewed 29/08/2009)
- Mitchell, W. J. (1999). *E-topia: Urban Life, Jim But Not As We Know It.* (Mas. U. Tech. Press Cambridge) ('Etopia')
- Murdoch, S. J. & Anderson, R. (2007). Shifting Borders. *Index on Censorship 36(4),* 156. MAS Ultra-School Edition. EBSCO http://ezproxy.usc.edu.au:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ulh&AN=27777748&site=ehost-live (accessed 22/08/2009)
- Neutze, M. (1997). Funding Urban Services: Options for physical infrastructure. (Allen & Unwin, St Leonards. NSW)
- OECD (2003). *Universal Service Obligations and Broadband*. Working Party on Telecommunication and Information Services Policies, Directorate for Science, Technology and Industry Committee for Information, Computer and Communications Policy. http://www.oecd.org/dataoecd/4/23/2496799.pdf (viewed 29/08/2009)
- OECD (2001). The Development of Broadband Access in OECD Countries. Working Party on Telecommunication and Information Services Policies, Directorate for Science, Technology and Industry Committee for Information, Computer and Communications Policy. http://www.oecd.org/dataoecd/48/33/2475737.pdf (viewed 29/08/2009)
- Porter, T. (2005). *Archispeak: an illustrated guide to architectural terms.* (Taylor & Francis, New York)

- Quiggin, J. & Potts, J. (2008). *Economics of Non-market Innovation and Digital Literacy* in McWilliam, K., Hartley, J., and Gibson, M., (eds) Digital Literacies. *Media Int. Australia*, No. 128 Ratcliffe, J., Stubbs, M., & Shepherd, M. (2001). *Urban Planning and Real Estate Development*. (2nd Ed, Spon Press, London)
- Rheingold, H. (2001). *The Virtual Community* in David Trend (ed) *Reading Digital Culture* (Blackwell Publishers Ltd, Oxford)
- Saunier, R. E. & Meganck, R. A. (2009). *Dictionary & Introduction to Global Environmental Governance*. (2nd Ed, Earthscan, London)
- Slevin, J. (2000). The Internet and Society. (Blackwell Publishers Ltd, Oxford)
- Sharpe, D. R. (2004). The Relevance of Ethnography to International Business Research in Marschan-Piekkari, R. & Welch, C. (eds) Handbook of Qualitative Research Methods for International Business. (Edward Elgar Publishing Limited, Cheltenham)
- Spurge, V. & Roberts, C. (2005). Broadband Technology: An Appraisal of The Availability and Use by Small And Medium Sized Enterprises. Paper presented at 11th PRRES Conference, Melb.U., Australia
- Svantesson, D. (2005). The characteristics making Internet communication challenge traditional models of regulation What every international jurist should know about the Internet. *Int. J. L. & Info. Tech.*, 13 (1), 39
- Thompson, S. (2007). Conclusion: Planning Australia into the Future in Thompson, S. (ed) Planning Australia: an overview of urban and regional planning. (Cambridge University Press, Melbourne)
- Walker, R. & Lewis, R. (2004). Beyond the Crabgrass Frontier: Industry and the Spread of North America Cities in Lewis, R. (ed) Manufacturing suburbs: building work and home on the metropolitan fringe. (Temple University Press, Philadephia)
- Wellman, B. & Guila, M. (1999). *Virtual communities as communities: Net surfers don't ride alone* in. Smith, M. A. & Kollock, P. (eds) *Communities in Cyberspace* (Routledge, London)

Legislation

Commonwealth of Australia Constitution Act (63 & 64 Victoria, Chapter 12)

Land Act 1994 (Qld) ('LA')

Land Title Act 1994 (Qld) ('LTA')

Lands Acquisition Act 1989 ('LAA')

SEQ Regional Plan 2005-2026 (Qld) ('SEQRP 2005') (

SEQ Regional Plan 2009-2031 (Qld) ('SEQRP 2009')

Sustainable Planning Act 2009 (Qld) ('SPA')

Telecommunications Act 1997 ('TA')

Telecommunications (Consumer Protection and Service Standards) Bill 2009 (Cth)

Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010 ('TLAFDB')

Trade Practices Act 1974 ('TPA')

Valuation of Land Act 1944 (Qld) ('VLA')

Cases

Australian Retirement Homes Ltd v PRSC & Anor [2007] QPEC 085 ('Aust. Retirement')

Bayside City Council v Telstra Corp Ltd [2004] HCA 19 ('Bayside')

Body Corporate for Kelly's Beach Resort v BSC & Ors [2003] QPEC 023 ('Kelly's Beach')

Buderim Developments Pty Ltd v Maroochy Shire Council & Ors [2008] QPEC 001 ('Buderim Dev.')

Clift and Anor v Gold Coast City Council [2005] QPEC 106 ('Clift')

Comkey Pty Ltd & Anor v Caboolture Shire Council & Ors [2005] QPEC 114 ('Comkey')

Commercial Radio Coffs Harbour Ltd v Fuller (1986) 61 CLR 47 ('Radio Coffs Harbour')

Commonwealth v Tasmania (1983) 158 CLR 1 ('Cth v Tas')

Habitat Development Group Pty Ltd v SCRC [2009] QPEC 037 ('Habitat')

Herald & Weekly Times Ltd v Commonwealth (1906) 115 CLR 418 ('Herald')

Hickey Lawyers (a firm) & Ors v Gold Coast City Council [2005] QPEC 022 ('Hickey')

Hofer v Maroochy Shire Council & Anor [2008] QPEC 90 ('Hofer')

Jones v The Commonwealth (No.1) [1963] HCA 43; 109 CLR 475 ('Jones v Cth No. 1')

Jones v Commonwealth (No. 2) [1965] HCA 6; (1965) 112 CLR 206 ('Jones v Cth No. 2')

Keilor Medical Centre Pty Ltd v Brimbank City Council [2007] VCAT 1593 ('Keilor')

Kent Street Pty Ltd & Ors v DNRM [2008] QLAC 0221 ('Kent')

Koowarta v Bjelke-Peterson (1982) 153 CLR 168 ('Koowarta')

Re Leppington Pastoral Co Pty Limited v DepT. Admin. Services [1990] FCA 206 ('Leppington')

PT Limited v DNRM [2006] QLC 0068 ('PT Ltd')

PT Limited & Westfield Management Ltd v DNRM [2007] QLAC 0077 ('Westfield')

PW Smith v Clarence City Council [2009] TASRMPAT 30 ('Smith v CCC')

R v Brislan; ex parte Williams [1935] HCA 78; (1935) 54 CLR 262 ('Brislan')

R v Burgess; Ex parte Henry (1936) 55 CLR 608 ('Burgess')

Ross Nielson Properties Pty Ltd v BCC & Anor; Yu Feng v BCC & Ors; C&B Consultants v BCC & Ors [2007] QPEC 003 ('Ross Nielson')

Seymour CBD P/L v Noosa Shire Council [2002] QPEC 021 ('Seymour')

South Australia v Honourable Peter Slipper MP [2003] FCA 1414 ('SA v Slipper')

Spiros Neofitou v Kingston City Council [1999] VCAT 1527 ('Spiros')

State of Qld v Springfield Land Corporation (No. 2) P/L & Anor [2009] QSC 143 (Springfield')

Sydney Harbour Foreshore Authority v Walker Corp. Pty Ltd [2005] NSWCA 251 ('Sydney v Walker')

Telstra Corporation Ltd v The Cth [2008] HCA 7 ('Telstra v Cth')

W H Blakeley & Co Pty Ltd v The Cth (1953) 87 CLR 501 ('Blakeley')

Webster v Caboolture Shire Council [2008] QPEC 82 ('Webster')

Submissions to the "National Broadband Network: Fibre-to-the-premises in greenfield estates, Consultation Paper", Department of Broadband, Communications and the Digital Economy, May 2009 All submissions found at - http://www.dbcde.gov.au/broadband/national broadband network/fibre in greenfield estates/fibre to the premises in greenfield estatessubmissions2?118413 result page=A (last viewed 04/09/2010)

Adelaide Hills Regional Development Board ('Adelaide')

Aurecon Australia Pty Ltd ('Aurecon')

Australian Information and Communications Technology in Education Committee ('AICTEC')

Australian Telecommunications Users Group ('ATUG')

Brisbane City Council ('BCC')

Broadcast Engineering Services Australia Pty Ltd ('BES')

Calero, Fernando ('Calero')

Central Western Queensland Remote Area Planning and Development Board 'CWQRA PDB')

Cisco Systems Australia 'CISCO')

City of Greater Geelong ('CGG')

ClubCOM Utilities Pty Ltd ('ClubCom')

Communications Alliance Ltd ('CAL')

Communications Expert Group ('CEG')

Council of Capital City Lord Mayors ('CCCLM')

Department of Business and Employment NT ('DBE NTG')

Department of Further Education, Employment Science and Technology ('DFEEEST')

Department of Planning NSW ('DPNSW')

Digital Economy Industry Working Group ('DEIWG')

Engineers Australia ('Engineers')

Ergon Energy ('Ergon')

FTTP Open Access Operators ('FTTP OAO')

FTTH Council Asia Pacific ('FTTH AP')

GHD Pty Ltd ('GHD')

Internode Pty Ltd ('Internode')

LandCorp

Master Builders Australia ('MBA')

Master Builders Queensland ('MBA Qld')

Optus Systems Pty Ltd ('Optus')

National Electrical Communications Association ('NECA')

Farin Sanaei ('Sanaei')

Standards Australia ('SA')

Sunshine Coast Regional Council ('SCRC')

Telstra Corporation Limited ('Telstra')

TransAct Capital Communications Pty Ltd ('TransAct')

TRE Developments Heritage Pacific ('TRE Dev.')

Universal Communications Group Pty Ltd and Open Access Networks Pty Ltd ('UCG')

Urban Development Institute of Australia ('UDIA')