

# CONCERNS ABOUT THE ROLLOUT OF BROADBAND: A LEGAL CONSIDERATION OF AUSTRALIA'S NBN GREENFIELD POLICY

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## ABSTRACT

*This paper examines the Australian federal government's proposal that developers take the primary role for deploying the National Broadband Network ('NBN') in greenfield estates. It identifies issues facing the NBN's implementation and concerns raised by industry. A failure to address these concerns may lessen industry support as well as adversely impact on consumers as NBN implementation costs are passed onto them. The author identifies the need for NBN legislation to clearly establish what is a 'greenfield estate'; how and when exemptions from implementation obligations will apply; and that NBN services must be treated the same as any other utility service.*

**Keywords:** Broadband, NBN, greenfield estates, brownfield sites, property rights

## INTRODUCTION

In 1999, Mitchell (1999) identified the need to ensure that areas can build on the benefits that technology will bring, whilst still ensuring that people can live, work and play there. Broadband networks are an important part of the future as they will enable faster and more efficient access to the internet and its services, which in turn will be a driver for broadband's deployment (Bouras *et al*, 2009). The issue of how these networks, and the users, will be regulated is secondary in importance only to the issue of how broadband network implementation will occur.

There are many concerns facing the deployment of broadband. Primarily, this is in respect of meeting the actual and perceived needs for the related infrastructure; as well as addressing issues of initial investment and ongoing costs (Allen Consulting, 2003). The practicalities involved with rollout in remote areas; the separate slow adoption by other users (Chang *et al*, 2003); and a reluctance by some suppliers to be involved (Wu, 2004) will impact on costs and thus on the viability of private broadband networks. In Australia, the federal government's response has been to legislate, as part of the implementation of the National Broadband Network ('NBN'), to require broadband deployment in greenfield estates.

## METHODOLOGY

The aim of this paper is to identify issues arising with respect to the legislated rollout of broadband in greenfield estates that need to be addressed to ensure a more seamless implementation of the NBN. Existing literature has been reviewed for the purpose of identifying concerns and as well, qualitative data was collected by reviewing submissions to the Greenfield Consultation Paper ('GCP'). Consistent with legal research, the literature review will consider relevant literature, as well as pertinent legislation and case law and as such, the material in the Literature Review forms part of the research methodology.

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, 2009c). A full list of the questions is contained in Appendix A.

An in-depth analysis of all questions was not feasible in this paper. The questions examined are shown in Table 1. These were selected on the basis that they are fundamental to the question of determining the type of estate to which the greenfield obligations should apply; and/or the method of operation of the NBN for the future, as this in turn may impact upon the obligation for delivery of the related infrastructure now.

**Table 1: Greenfield estates consultation paper questions examined**

<b>Number</b>	<b>Question</b>
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?

## Limitations

An initial limitation is that, as the due date for receipt of submissions was 12 June 2009 (14 days after it was emailed to interested parties), only 75 submissions were received. This considerably reduced the pool of responses; as well it narrowed the field of possible concerns as only a limited number of non-industry parties responded. There is a risk that the predispositions of the submitters may skew their responses. The profile of the submitters included individuals (3); telecommunications industry (18); LGAs (13); property related industry (14); utility providers (8); ICT industry (10); and State government departments (5). The majority of detailed submissions were made by industry and their responses therefore tend to be biased towards their own their industry's interests.

The submissions were reviewed for the purpose of identification of common concerns. A limitation was that whilst answers generally were detailed and stated to be in response to a specific question, not all responses (even from industry) identified the question being answered. Some responses were given holistically as well as by number references; and for others, no response was provided. Another limitation was that four submissions were not able to be opened due to their formatting. This left 71 viable submissions for analysis. A final limitation was that the government also held confidential consultations with industry and other peak bodies (Mason, 2009). Whilst the submissions are publically available, the results of the industry consultations are not and therefore any additional concerns raised by that confidential process cannot be identified.

## LITERATURE REVIEW

Section 51(v) of the Commonwealth Constitution grants exclusive power to the federal government to legislate with respect to telecommunications services. This power has been interpreted to include responsibility for a wide range of services (Brislan (1935); Herald (1906); Jones v Cth No. 2 (1965)) and more recently to extend to broadband. (Chin, 2000) 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."*

In comparison to the rest of the world, Australia is remote (Capling & Nossal, 2001). Australia also, in comparison to its size, is small with a dispersed population which makes the provision of some services expensive in certain areas (Battersby, 2006). Internally, rural areas have diminishing population bases, with approximately 68% of

Australians now living in cities (Islam *et al*, 2008). The current lack of job prospects in rural areas (PCA & CCCLM, 2000) has exacerbated this trend and reduced the available funds for service provision. In many areas therefore, either there is not the collective mass or asset base necessary to make the private provision of some services viable.

In Australia therefore, telecommunications services generally have been provided either by the government directly, or through a corporation under its control (Bayside (2004) [6]). Despite this, or may be because of it, the establishment of broadband in Australia has had a volatile past (O'Regan & Ryan, 2006). The infrastructure challenges facing broadband rollout are various and, in addition to meeting actual and perceived need for the infrastructure itself, include issues of planning, initial investment and ongoing costs (Allen Consulting, 2003). To date, Australian planning for substantial infrastructure such as broadband has been inadequate (Thompson, 2007) and arguably underfunded when compared with other first world countries (Allen Consulting, 2003).

Telecommunications has a key role in the global economy (Economides, 2006). Broadband will have an equally significant role to play in the future economy and the international community, including Australia, is working towards supporting full use by all individuals (OECD, 2008). However, the government's approach to greenfield estate rollout is seen as interfering in the market, in that it is mandating that rollout occur instead of letting the market regulate rollout at a pace and price its consumers can sustain (Middleton, 2007).

Nonetheless, it may be that to ensure broadband rollout, the government has no choice but to mandate rollout. Previously billions of dollars were required to enable connection to the existing long standing telecommunications network (Rheingold, 2001). The anticipated costs of implementing broadband are no less substantial. A primary reason the government changed from its original proposal to seek to have industry itself build the NBN was because the changes to the global financial position had directly, and negatively, impacted on the ability of the proposers to raise the necessary capital (Scott *et al*, 2009). These are contra indicators for private investment. The consequence being that legislating for broadband's rollout may be the only way to ensure its ubiquity, as otherwise broadband will only be available where it is financially viable for the provider to provide it.

In some respects, the primary concern about the greenfield legislation arises because there of a lack of clarity within it as to what is a 'greenfield estate' and therefore a misunderstanding as to who will be affected by the legislation. Accepted non-legislative definitions of greenfield estate range from "*previously undeveloped, virgin landscape setting*" (Porter, 2004 p. 93); to "*where there has never been any building before*" (Dobson *et al*, 2000 p. 38); to one where the factory built on it was "*built*

*from scratch*” (Sharpe, 2004, p. 312). However, as time can enable nature to recapture brownfield land to give it an appearance of always having been a green field (Griffiths, 1998), to claim that a greenfield estate is one that has never been built upon may be inaccurate. Other authors identify greenfield estates by reference to development potential (Gollagher, 2007); as one created by the destruction of previously existing residential development (Davis, 1992, p. 230); and as undeveloped land on the “*periphery of an existing built-up area.*” (Saunier & Meganck, 2009, p. 161).

The term has been used by the Courts, although most often without 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 explanations. These include land “*with potential as yet unproven for... development*” (Westfield [2007] [34]); and absent a “*past successful trading history*” (Kent (2008) [126]).

In other cases (Buderim Dev. (2008) [36]; Webster (2008) [119]), the term was used in the context of the South East Queensland Regional Plan 2005-2026 (‘SEQRP 2005’). This provides that greenfield means “[a]reas of undeveloped land in the Urban Footprint suitable for urban development.” (SEQRP 2005, p. 133). The current 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, which is not defined (SEQRP 2009). The Queensland Land Supply Strategy (DPI 2008) however adopts the SEQRP 2005 meaning.

A lack of a clear legislative definition is integral to many of the concerns regarding greenfield rollout. However, merely adopting a previously used or proposed definition for NBN purposes is potentially flawed, as it does not address the specific issues facing the NBN. It is suggested that an appropriate definition of greenfield land for NBN purposes is one that directly links the land to the available and/or easily (and inexpensively) connected services. Where no services are currently connected or it is costly to connect necessary services, then the land should be deemed to be greenfield.

Metcalfe’s law provides that a network grows in value as the number of its members grows (Murdoch & Anderson, 2007). It may be that what is required to ensure broadband’s future in Australia is the construction of one network. Nevertheless, the reality is that the Australian telecommunications industry includes a variety of participants and service providers (Glasson Report, 2008); many of whom are independently creating their own networks. This includes Telstra Corporation Limited (‘Telstra’). Telstra commenced operation on 13 April 1993 (Worthing (1999) [9]).

In 1997, the Australian telecommunications industry was deregulated and Telstra was privatised but without structural separation of its wholesale and retail divisions. Full privatisation and operational separation occurred in 2005 (CCIA 2005) and was subject to Telstra maintaining a presence in regional Australia (FPOMA 2005). Telstra still offers both wholesale and retail services and is the primary owner of most of Australia's telecommunications infrastructure (Clear, 2003). In spite of proposals meant to force Telstra to fully separate (Conroy, 2009b) and announcements about proposed agreements with NBN Co Limited, Telstra retains a level of dominance (Ashkanasy, 2007). This will impact on the NBN.

## PROPOSED LEGISLATIVE AMENDMENTS

Access to infrastructure and services is managed through declarations made by the ACCC under Part XIC TPA and access to land for telecommunication purposes is specifically regulated by Schedule 3 (TA 1997). Access is granted for the purposes of installing or maintaining a facility (Div. 3, Sch. 3, TA). 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 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).

The government's intention is that the rollout of fibre optic cable in greenfield estates is primarily to be undertaken by developers (Proposed Part 20A TA, to be inserted by Item 10 TLAFFDB). The *Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010* ('TLAFFDB') was to require the construction of optic fibre ready homes for developments obtaining planning approval after 1 July 2010 (Clause 2, TLAFFDB). It did 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 372G, TA) are sold or leased (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) TA).

The most recent government proposal was that from 1 January 2011, the NBN Co Limited would provide infrastructure in greenfield estates as a last resort where no other provider was available (DBCDE, 2010). Some of the construction 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 are 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 federal government anticipated changes will be required to State planning regimes but, in any event, the TLAfDB was designed to operate without needing there to be any changes to State laws (DBCDE, 2009a).

## Issues

An alternative to reliance on declarations made pursuant to Part XIC may be for public utility easements to be granted to enable the laying of cables under, or over, land. These easements would be granted to network operators. Granting easements however would present issues for developers and ongoing issues for land use and property rights. Specific access rights may need to be proscribed under legislation, for inspection, construction and maintenance.

As the creation of public utility easements is effected under State land legislation (i.e. Section 89(2)(a)(iii) LTA and Section 369(2)(c) LA), this will mean needing to ensure consistent application of easement conditions nationally. To facilitate this process, consultation with the telecommunications industry; community groups; LGAs; 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 issues are appropriately addressed. Also requiring specific consideration are the issues facing rural Australia, as these are unique. Of perhaps most significance therefore was the response provided by the Shire of Goomalling to the GCP (Goomalling, 2009). Its one page letter provided, *inter alia*, that –

*Council is utterly disappointed that rural towns less than 1,000 ... will not be included in the Broadband Network upgrade throughout Australia. ... small rural communities are discriminated against but deserve the same quality of life as elsewhere.*

Subsequently, on 1 July 2009, Minister Conroy announced specific funding for priority rollout of broadband in regional areas (Conroy, 2009a). The focus on rural

areas as a priority also was addressed in the arrangements made with the parliamentary independents to enable the formation of the minority government after the 2010 federal election. Finally, the challenges facing NBN implementation in greenfield estates, although similar to those for brown field sites or infill areas, are not the same. The technological requirements for buildings include the need for 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 are not the same as will be required for greenfield estates and specific transitional arrangements for brownfield and infill sites as part of the NBN's implementation will be required.

## **RESULTS AND DISCUSSION**

The answers to the four selected GCP questions were analysed and the responses grouped according to whether they identified an issue regarding the appropriate definition of 'greenfield estate', rollout concerns or cost.

### **Definition of Greenfield estate**

Whilst perhaps more logical to commence with Question 1, the GCP asked several policy style questions prior to asking the fundamental question of what a greenfield estate should be. An important part of fully understanding the impact of the government's proposal is clearly identifying what is meant by the term 'greenfield estate' (UDIA, 2009). As the answer to Question 9 will be fundamental for ascertaining whether or not the proposed legislation will apply to a proposed development, this is where our discussion commences.

### **Question 9 - What is the appropriate number of lots of premises required for a development to qualify as a Greenfield development requiring FTTP?**

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. The data available is not conclusive as, despite the fact that how a greenfield estate is defined will directly impact on whether or not the proposed legislation will apply to a particular development, 22 submitters provided no response. The eight that responded considered the issue needed more consideration, or they required further information, before they could provide a submission. Table 2 provides a snapshot of the responses.



**Table 2: Responses to question 9**

<b>Preferred definition</b>	<b>Number of responses</b>
No minimum number of lots	16
Three plus	2
Five plus	1
Ten plus	4
Need to link to economic factors	8
Distance from existing services	3
Need to construct a road	1
Linked to current land status	4
Other	2
More information required	8
No response	22

The answers provided were not always clear, or well structured, and some required an interpretation of their meaning. Of the responses received, 16 submitters considered that there should be no minimum number of lots as part of any definition. 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).

Eight responses, directly or by reference, considered it was necessary to link a definition of 'greenfield estate' to economic factors (Ergon, 2009). Others considered that an appropriate definition is one that locates the estate within a realistic distance of existing serviced communities (Telstra, 2009); or relevant infrastructure (Landcorp, 2009); or by reference to whether it is necessary to construct road access (BCC, 2009). Most relevant to an acceptable definition were responses that relate to the status of the land itself – i.e. as to whether there is already a building constructed upon it (FTTP OAO, 2009); or if any existing building would impact upon further development (MBA, 2009).

## **Development concerns**

Questions 1, 15 and 27 are relevant for development, as are some of the responses to Question 9 that were made as additional comments. In order to clearly identify the issues, responses to Questions 1, 15 and 27 are considered separately.

### **Question 1 - What are the relative merits of the models outlined? Which is the preferable approach? Why?**

The GCP proposed two models for discussion purposes –

“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”.

The government’s preference was model 2. Submitters were not as definite. Table 3 provides a snapshot of the responses.

**Table 3: Responses to question 1**

<b>Preferred model</b>	<b>Number of responses</b>
1	14
2	28
Combination	3
No preference	10
Other	3
Same as utilities	1
Neither	1
No response	11

Of the submissions received, 28 submitters supported model 2 and 14 supported model 1. The balance provided no response; did not support either; or supported a combination or variation of the models. Some suggested that either model in isolation from the other would not be effective (FTTH AP, 2009; Calero, 2009). Others supported treating the fibre optic cables in the same manner as other utilities. (Engineers, 2009). Subsequent 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’s (2009) bias was clear in its response that whichever approach was taken must “...give appropriate consideration to the special needs of education institutions.”.

Telstra (2009) suggested that the preferred model should be one that is legislated federally to ensure that across Australia there is consistency of application. Other telecommunication providers felt the lead role should be taken by NBN Co Limited (Optus, 2009; TransAct, 2009). As identified, and as has occurred, a lack of coordination would delay the start date (Ergon, 2009).

### **Question 15 - What exemption arrangements, if any, would be appropriate and how should they be administered?**

Question 15 necessitated a consideration of potential exemptions from compliance with any legislated regime. Of those that responded, two considered that there should be broad exemptions (BCC, 2009; CCCLM, 2009), with the balance making specific suggestions as to the exemptions necessary. These ranged from enabling exemptions

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). A snapshot of responses is contained in Table 4.

**Table 4: Responses to question 15**

<b>Should there be exemptions?</b>	<b>Number of responses</b>
Yes	6
Yes - broad	2
Yes - specific type	20
No	4
No response	34
Other	5

Current contractual arrangements could impact on a developer's ability to rollout fibre optic cables and therefore an exemption in these circumstances was considered appropriate by several submitters (TRE Dev., 2009; UDIA, 2009). However, an exemption on the basis that more services will be provided than is legislatively required (DFEEEST, 2009) is, in this author's opinion, not appropriate. Nor is the suggestion that States be given flexibility to vary nationally set exemptions (DPNSW, 2009; Landcorp, 2009; MBA Qld, 2009). As Telstra (2009) points out, if exemptions are permitted, then such exemptions must be clearly 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 a means of altering consumers is one that government should consider implementing.

**Question 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?**

Question 27 relates to the proposed manner of operation of the NBN. 32 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. A snapshot of responses is contained in Table 5.

**Table 5: Responses to question 27**

<b>Should the NBN be wholesale?</b>	<b>Number of responses</b>
Yes	23
No	3
Not sure	4
Specific response	9
No response	32

Of those that responded, BES (2009) considered that there may be a need initially for the network also to provide retail services. 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), and that there should not be duplication of services or resources (FTTH AP, 2009).

Ergon (2009) 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. Other submitters identified that issues regarding the Universal Service Obligation also will need to be addressed (Telstra, 2009; TransAct 2009).

## **Costs**

There was no question asked in the GCP about costs or cost issues, but many submitters identified this as a concern. In considering the viability of broadband, costs are critical. Responses indicate that the government proposal may not be economically viable except for large estates (Calero, 2009). Yet others indicated that 'competition' in so small a market may make many suppliers unviable (Cox, 2009), and that the installation of fibre optic cables simply should be treated similarly to the installation of other utilities (CWQRA PDB, 2009; LDA, 2009).

The government estimated that the cost of installing fibre would be approximately \$2,500 per block. This estimated installation cost is considerably more than the cost of copper cable (MBA Qld, 2009) and may in fact be unrealistically low (MBA Qld, 2009). Consideration of the true impact of broadband rollout on land values requires specialized consideration. This is beyond the scope of this article.

Finally, industry also suggested that the current greenfield proposal is inequitable in that the existence of utility services does not increase the price of either brownfield sites or greenfield estates, but will be recoverable from purchasers of greenfield estate land as part of the price they pay (HIA, 2009).

## CONCLUSION

The review of the literature, legislation, case law and the GCP submissions identifies some clear concerns that need to be addressed by the federal government as it works to implement the NBN. These concerns are that the definition of 'greenfield estate' is not clear; that the greenfield specific solutions may be inappropriate for brown field and infill sites; and that although perceived to be a utility, from a cost perspective, connection to the NBN will not be treated as such in greenfield estates. An overriding concern is that the proposed legislation will inappropriately and inequitably impose onerous and costly obligations on private land developers, which in turn will be passed onto consumers. To address these legislatively will require clear policy and direction from government.

Appropriate consideration needs to be given not only as to what is to be delivered as part of the NBN's implementation, but how high speed broadband should be delivered and whether what is proposed will meet both the short and long term needs of all Australians. 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 infrastructure.

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

*Telecommunications Act 1997* ('TA')

*Telecommunications Legislation Amendment (Competition and Consumer Issues) Act 2005* ('CCIA')

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

*Telecommunications Legislation Amendment (Future Proofing and Other Measures) Act 2005* ('FPOMA')

*Trade Practices Act 1974* ('TPA')

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

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*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')

*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')  
*Habitat Development Group Pty Ltd v SCRC* [2009] QPEC 037 ('Habitat')  
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*Hickey Lawyers (a firm) & Ors v Gold Coast City Council* [2005] QPEC 022 ('Hickey')  
*Hofer v Maroochy Shire Council & Anor* [2008] QPEC 90 ('Hofer')  
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*Keilor Medical Centre Pty Ltd v Brimbank City Council* [2007] VCAT 1593 ('Keilor')  
*Kent Street Pty Ltd & Ors v DNRM* [2008] QLAC 0221 ('Kent')  
*PT Limited & Westfield Management Ltd v DNRM* [2007] QLAC 0077 ('Westfield')  
*PW Smith v Clarence City Council* [2009] TASRMPAT 30 ('Smith v CCC')  
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*State of Qld v Springfield Land Corporation (No. 2) P/L & Anor* [2009] QSC 143 ('Springfield')  
*Telstra Corporation Ltd v Worthing* [1999] HCA 12; 197 CLR 61; 73 ALJR 565 ('Worthing')  
*Webster v Caboolture Shire Council* [2008] QPEC 82 ('Webster')

### **Submissions to the Greenfield Consultation Paper -**

[http://www.dbcde.gov.au/broadband/national\\_broadband\\_network/fibre\\_in\\_greenfield\\_estates/fibre\\_to\\_the\\_premises\\_in\\_greenfield\\_estatessubmissions2?118413\\_result\\_page=A](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')  
Cox, Kevin ('Cox')  
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')  
Housing Industry Association ('HIA')  
Internode Pty Ltd ('Internode')  
LandCorp  
Land Development Agency ('LDA')  
Master Builders Australia ('MBA')  
Master Builders Queensland ('MBA Qld')  
Optus Systems Pty Ltd ('Optus')  
National Electrical Communications Association ('NECA')  
Sanaei, F. ('Sanaei')  
Shire of Goomalling ('Goomalling')  
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')

## **Appendix A**

### **Questions in Greenfield's Consultation Paper**

1. What are the relative merits of the models outlined? Which is the preferable approach? Why?
2. Is any action required by the Australian Government to facilitate local councils and planning authorities requiring the installation of FTTP facilities?
3. Would the preparation of model laws, templates and/or national specifications or guidelines assist local councils and planning authorities with implementation?
4. Would the development of educational tools for industry assist? If so, what?
5. Would the introduction of a certification system for the installation and performance of FTTP networks be beneficial?
6. To what extent is a nationally co-ordinated approach preferable to one where state and territory or local governments take the lead?
7. If the Australian Government were to place obligations on developers and builders, at what stage of development should obligations be placed and on whom?
8. Is there scope for the provision of lead-ins in greenfields to be made contestable?
9. What is the appropriate number of lots or premises required for a development to qualify as a greenfield development requiring FTTP? What other issues or factors should inform the definition?
10. What mechanisms could be used to achieve a consistent approach across large developments involving multiple developers and/or over an extended period of time? For example, what provision should be made in relation to estates in which lots are released over a number of years?
11. Are there any special requirements for multi-dwelling units or office blocks?
12. Should the threshold for the connection of FTTP for new multi-dwelling units be lower than other estates or should all new multi-dwelling units be connected with FTTP? What threshold, if any, should apply?
13. What specified characteristics should be considered for the purposes of defining FTTP for greenfields?
14. Are there particular issues in relation to backhaul between the greenfield estate and point of interconnection to a national network that need to be considered?
15. What exemption arrangements, if any, would be appropriate and how should they be administered?
16. Are there any particular circumstances under which developments should be exempt from the Australian Government's requirements for FTTP in greenfields (for example, for large area subdivisions in rural and remote Australia)?
17. Are there any factors that the Australian Government should be aware of in relation to the commencement of FTTP requirements?
18. Under what circumstances, if any, should transitional arrangements allow for the installation of copper-based infrastructure?

19. Should the FTTP requirement apply to developments approved before 1 July 2010 but for which telecommunications infrastructure has not yet been contracted or provided? What transitional arrangements may be appropriate in these circumstances?
20. Is the Australian Government's intention that the NBN company not overbuild existing FTTP developments in greenfield estates appropriate?
21. Are there any specific issues that should be considered in relation to the role of the NBN company in greenfield estates?
22. What measures could the Australian Government introduce to facilitate competition for the provision of FTTP infrastructure in greenfield developments?
23. Could the competitive provision of FTTP in greenfields be facilitated by a national online database of proposed developments accessible either publicly or to licensed carriers? Could this also assist with the planning of telecommunications infrastructure in such estates?
24. Is it sufficient for access to wholesale FTTP services in greenfield estates to be delivered through the telecommunications-specific access regime in Part XIC of the Trade Practices Act?
25. Should the ACCC conduct a Part XIC inquiry into the specification/definition of the access service to be supplied over FTTP networks, with particular reference to greenfield estates?
26. Should an alternative approach to providing access such as mandatory access to FTTP networks in greenfield estates be adopted? If so, what? Why?
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?
28. What are the minimum equivalence arrangements that should be put in place to ensure wholesale services are provided on equivalent price and non-price terms and conditions in greenfields?
29. Would it be appropriate and workable to have different access and equivalence arrangements for greenfield FTTP networks depending on whether or not they were operating before 1 July 2010?
30. Should Telstra continue to be the universal service provider in greenfield estates where FTTP is deployed by an alternative provider and retail providers are able to use these networks to supply voice services?
31. If Telstra should continue as the universal service provider in greenfield estates, would it continue to be appropriate for Telstra to determine the technology it uses to fulfil its USO in those areas?
32. If Telstra were not to continue as the universal service provider, what, if any, obligations should be imposed on whom to ensure that consumers continue to have access to basic telephony services in greenfield estates?
33. Will the proposed greenfields model deliver satisfactory retail pricing outcomes? If not, would new mechanisms to regulate prices in greenfields be necessary and

workable? What form might such mechanisms take? What would be the implications for such mechanisms on the broader market?

34. How would progress in delivering FTTP in greenfield estates be best monitored and reported?
35. What further steps should be undertaken to support this initiative?
36. Would the establishment of a stakeholder group assist with the implementation?

If so, how many members would be appropriate, and who should be represented? What should be its terms of reference?

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