



3 May 2010

Ms Anne Holmes
Manager – Fibre in New Developments Section
Department of Broadband, Communications and the Digital Economy

via e-mail: Anne.Holmes@dbcde.gov.au

**Response to Position Paper
Proposed Subordinate Legislation to Give Effect to Fibre in New Developments**

Dear Anne

Thank you for the opportunity for the Urban Development Institute of Australia (UDIA) to provide a written response to the Position Paper – Proposed Subordinate Legislation to Give Effect to Fibre in New Developments, which was publically released on 16 April 2010.

As you are aware UDIA is the peak body representing the urban development industry in Australia, and has been actively engaged with the Government in the consultation process in relation to this legislation.

UDIA has previously provided a comprehensive submission to the Government on the Agenda Paper on Greenfields Subordinate Legislation, much of the content of which is relevant to the Position Paper. That submission is included with UDIA's response to the Position Paper at Attachment A.

UDIA also provided a submission to the Senate Committee Inquiry into the *Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010*, which outlines UDIA's views in relation to the key aspects of the legislation. This submission is also included with this response at Attachment B.

In simple terms, the UDIA is of the view that the proposed FTTP be the modern replacement for copper and that its installation be treated in the same way as for the current installation of copper cables into the development areas, and onward to the premise.

UDIA is also of the view that there should be no difference between greenfields and existing housing in regard to the NBN project. In particular UDIA believes that:

- There **MUST** be equitable treatment of both Greenfields and Brownfield customers in relation to the funding of a National FTTP deployment.

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- That the NBN project should align with the Greenfields FTTP deployment requirements and share responsibility and consideration of costs for deployment of FTTP in these locations.

UDIA believes it would be beneficial if it were able to meet with the Department to discuss the contents of this submission (and attachments) in greater detail. I will be in contact with you to arrange a mutually suitable time for us to meet. In the meantime I can be contacted on 0422 022 746 or rlindsay@udia.com.au

Yours sincerely



RICHARD LINDSAY
Chief Executive Officer

Comments on Position Paper

Introduction

UDIA wishes to make the point up front that in general, the development industry is very supportive of the opportunity for improved telecommunications services to be made available in Greenfield sites offered by the NBN.

A number of developers across Australia have already undertaken to implement Fibre-To-The-Premises (FTTP) in their residential developments, and UDIA is keen to see an accepted industry standard for the deployment of FTTP as soon as possible.

The Position Paper proposes that the cost of deploying FTTP in new developments will be met by the developer.

This has created an environment of financial uncertainty for many developers who will be mandated to pay the upfront costs of installing FTTP in Greenfield estates. In particular, this proposed legislation is highly likely to adversely affect the commerciality of affordable and low income housing developments.

Accordingly, UDIA strongly believes that there should be no difference in relation to the treatment of new estates and the retrofitting of existing housing for FTTP. It is highly inequitable for there to be an upfront capital charge for Greenfield estates but a cost-recovery approach for elsewhere.

New home owners should not be required to pay for the provision of FTTP, whilst owners of existing homes are not.

In addition, the funding model for the NBN is still largely unknown. It is also not known what impact the transition from copper to fibre will have on the operation and funding of the Universal Service Obligation (USO) fund.

UDIA is of the view that any revision of the USO should take into account the establishment of the NBN, and that the USO fund may be a potential source of funding for the deployment of FTTP in new developments.

The legislation and position paper provides that certain new developments be fibre ready by 1 July 2010.

The development industry cannot agree to the 'fibre ready' compliance date of 1 July 2010 until the 'fibre ready' requirements of the NBN co network architecture have been published.

This is essential to avoid any future costs associated with incompatibilities and associated reworks. The NBN co. 'fibre ready' design requirements need to be known. This is because the spatial, planning and commercial impacts of these requirements has to be known and considered by the developer well before the commencement of any civil development works, in order to be incorporated into their overall commercial assessment of the project.

In addition, it is still uncertain how far the NBN network will extend into Greenfield sites, and also who is responsible for the provision of back-haul into Greenfield sites.

UDIA contends that developers should only be responsible for providing the trench for the fibre infrastructure (pit and pipe), and the NBN project should assist with financial support for the installation of the pits and pipes, the backhaul, the head-end and the fibre distribution network to the home.

UDIA further contends that the cost of backhaul should be treated separately from the cost of fibre deployment. The UDIA considers that backhaul is part of a National Broadband infrastructure backbone that can potentially service multiple sites in both greenfield and brownfield developments and therefore should be considered an essential component of the National Broadband Network. Backhaul costs should definitely not be a cost that requires developer contribution and should be addressed by the NBN project.

Telstra recently announced that it has changed its policy in regard to the installation of telecommunications network infrastructure in Greenfields developments.

According to the statement on the Telstra website:

“For developments where the developer has not made arrangements to have FTTP infrastructure installed, Telstra will no longer deploy copper cable. Additionally, Telstra may require a developer to pay a contribution towards the cost of the installation of any telecommunications infrastructure in Greenfields developments, including fibre.”

This announcement has the potential to render the ‘fibre-ready’ requirement in the legislation essentially meaningless, and has created a situation whereby commercial realities are likely to over-ride the intent of the legislation. The Position Paper does not appear to have taken the Telstra announcement into account in regard to the requirement for developments to be ‘fibre-ready’.

Geographical Coverage

UDIA’s views on this are outlined in Attachment A.

UDIA believes that to avoid ambiguity of interpretation, a consistent approach should be adopted nationally. The requirement as to whether a development must deploy FTTP or be ‘fibre ready’ should be as simple as possible to interpret and be as equitable as possible in its treatment. Ideally, a consistent FTTP deployment model should be considered that avoids the need for complex, time consuming and potentially costly interpretation by consultants. The legislative model should be as easy to interpret for smaller developers as it is for larger developers and will need to contemplate the consideration of remote sites that are not located in Fibre Serving Areas.

Types of Developments Captured

Whilst UDIA acknowledges the Government's attempts to provide certainty to the industry in relation to which developments will be captured by the legislation, we believe that the solution outlined in the position paper is too simplistic for what is a complex topic.

UDIA's views are outlined in detail in Attachment A.

UDIA believes, that whilst a size threshold limit is easy to interpret from a regulatory compliance perspective, it is likely to be inequitable in its treatment of different development types and therefore a size threshold limit cannot be effectively utilised as a compliance criteria.

In relation to a cost threshold, UDIA does not support the \$3,000 price threshold proposed in the paper.

Again, UDIA believes this is too simplistic a solution for what is a complex topic, and will effectively create a price floor of \$3,000 for all developments.

As outlined in Attachment A, The total costs previously identified will usually depend upon the providers experience and capabilities and the geographic location of the site (that affects pricing such as: material transport costs, labour costs etc.) Defining a cost threshold limit will be reliant on industry benchmarks for the cost of a delivering a standard FTTP design.

Currently FTTP costs vary from provider to provider and project type to project type based upon the requirements of the developer e.g. costs per dwelling for detached dwellings in a large development will differ from the costs per dwelling for a multi-story apartment building. Therefore, it is suggested that standardised pricing models need to be identified for each development type and at a minimum for detached dwellings and multi-unit dwellings.

This will then determine a cost threshold for each development type e.g.:

- detached dwelling sites
- multi-unit dwellings

The reference design used for calculating the costs per dwelling type should be based upon the same reference architecture used by NBN co. This will ensure a level of parity with the broader NBN project and can benchmark the costs against known costs in this program. The defined cost threshold limits would need to be reviewed and updated on a regular basis.

Practical Date of Effect

The legislation is scheduled to come into effect on 1 July 2010; however UDIA believes that this deadline is unachievable.

Decisions in relation to the provision of FTTP are usually made a number of years in advance of subdivision work and are based upon cost calculations that are made as a part of a commercial assessment for the development. The current commencement date will not allow adequate time for the planning to be undertaken and may also result in an unfavorable commercial assessment with the addition of the FTTP costs.

Therefore, unless a developer has already made planning and cost allowances for the provision of FTTP into a Greenfield estate, it would be extremely difficult to comply with the 1 July 2010 start-date.

Consequently, UDIA strongly recommends that a moratorium on the start date for this initiative be implemented until such time as there is significantly greater certainty and detail regarding the technical and financial aspects of this legislation.

UDIA urges caution in using the Six Stage Generic Development Pipeline to determine the practical date of effect of the legislation on developments. As outlined in the position paper, the States and Territories have different planning systems, and not all align with the six stages in the Pipeline (which was designed to be more of a simplistic example of the development process, rather than a definitive process).

However UDIA believes that that developers need to be aware of their obligations as early as possible in the development process to allow for adequate planning, cost evaluation etc.

Attachment A

UDIA Submission Key Issues Greenfields Subordinate Legislation – Discussion Paper

1. GEOGRAPHIC COVERAGE AND EXEMPTIONS

Where will the subordinate legislation apply geographically?

NBN Co have stated¹ that in locations where fibre deployment will not be possible, that wireless or satellite technologies would be used to provide broadband speeds up to 20Mbps (compared to 100Mbps for fibre). No other information has been made available as to how this 20Mbps service would be delivered to each home and whether fibre is preferred to be utilised in any way.

Therefore, the answer as to whether a remote greenfield site has to be “fibre ready” can only be determined based upon:

- § Clarification of NBN Co’s model for wireless and satellite delivery of services.
- § An assessment and determination of whether a site will fall within a Fibre Serving Area to be provided with services by NBN Co.

Developers will require an immediate determination by NBN Co at stage 1 of the ‘Generic Pipeline for Greenfield Development’ as to whether a development site falls within a Fibre Serving Area and if it doesn’t, to determine if there are any ‘fibre ready’ requirements for distribution of service delivered via wireless or satellite technologies.

Should the subordinate legislation apply on a State, Territory or regional basis?

To avoid ambiguity of interpretation, a consistent approach should be adopted nationally. The requirement as to whether a development must deploy FTTP or be ‘fibre ready’ should be as simple as possible to interpret and be as equitable as possible in its treatment. Ideally, a consistent FTTP deployment model should be considered that avoids the need for complex, time consuming and potentially costly interpretation by consultants. The legislative model should be as easy to interpret for smaller developers as it is for larger developers and will need to contemplate the consideration of remote sites that are not located in Fibre Serving Areas.

2. TYPES OF DEVELOPMENTS TO BE CAPTURED

What types of developments would need to be fibre ready?

The terminology used to describe different development typologies varies significantly between jurisdictions and between the development and service industries. For example, in the development industry, an apartment building is referred to as a ‘*multi-unit dwelling*’. In the telecommunications industry this is referred to as a *multi-dwelling* unit or MDU.

Therefore, it is highly recommended that clarification of the terminologies used to describe ‘development types’ should be sought from all local and state planning authorities to ensure that accurate terminology is used in any proposed legislation. This will enable the legislation to be consistently interpreted.

¹ NBN Co Network and Operations Information Session, Sydney March 26, 2010.

What fibre-ready facilities would be required in in-fill projects where there's existing passive infrastructure?

The department has defined "fibre ready" and 'fibre-ready facilities' as "*passive infrastructure like ducting and pits which permit the ready roll-out of fibre in the future*". In addition to pit and pipe infrastructure there is additional FTTP infrastructure for the active components of the network that will need to be considered from a planning and spatial basis.

The specification, number and arrangement of this infrastructure will be dependent upon the size of the development and the technical architecture of the FTTP solution that will be installed for a site at a later date. It is therefore assumed that if a site is only required to be "fibre-ready" then the design of the passive infrastructure has to be aligned to the same NBN architecture being deployed in other areas by NBN Co.

To date, the NBN co. Network architecture is largely unknown by the property development industry. However, feedback from developers who have deployed FTTP in their developments and limited NBN Co Information Sessions, have identified the spatial requirement for the following types of facilities:

- § A Communications Head End – for large sites. Typically a 3x 4m minimum shelter plus the required council planning setbacks or a solution that fits into the basement of a building. In NBN Co briefings, this equivalent type of facility is referred to as a Fibre Access Node (FAN) where each FAN is capable of serving up to 3200 dwellings in a fibre distribution area.
- § Fibre Distribution Hubs – street cabinets required per x number of dwellings.
- § Antenna location for an MATV solution for FTA TV over fibre.
- § Dish locations for PayTV solution over fibre.

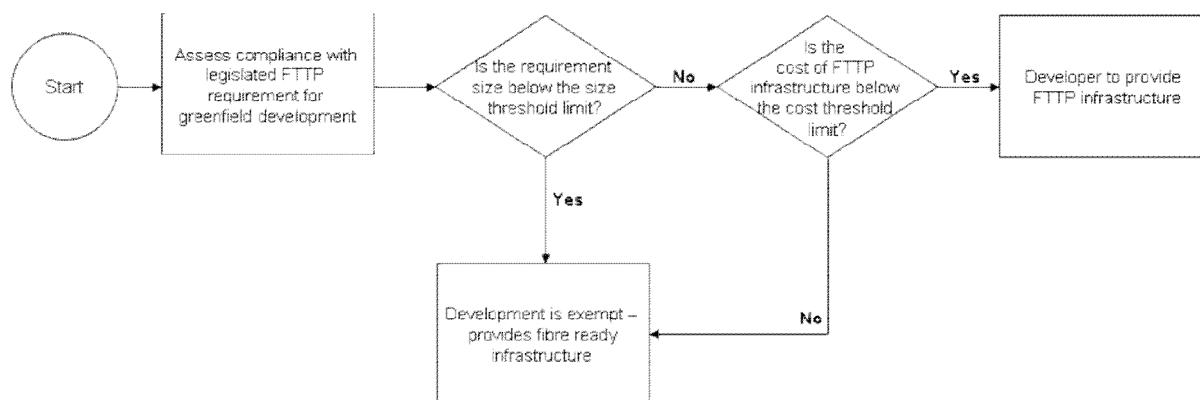
The location and treatment of these components will be dependent upon the following, inter alia:

- § spatial planning requirements – where can these facilities fit on the site;
- § local authority planning and construction approval requirements;
- § site yield limitations – can the development afford to lose the space required; and
- § street alignment with other utilities such as power, water, gas.

It is imperative that the NBN co. spatial requirements of the passive network infrastructure are known in order to be properly allowed for planning and cost analysis. This is essential to avoid any costs associated with incompatibilities and associated reworks.

What sort of threshold should be implemented?

The requirement to install fibre, based upon an assessment of project size and estimated cost, is dependent upon a large number of variables. This variability adds complexity to a simple determination of these threshold numbers. The UDIA interpretation of this proposal is summarised as:



The options for the size and cost thresholds are discussed below:

Size Threshold Assessment

Simplistically, a practical size threshold number is dependent upon an assessment of commercial affordability for the type of development and a practical consideration of how the solution can be delivered to a given site. For example, anecdotal evidence would suggest that a threshold limit could be around 400 to 600 dwellings for detached dwellings using one type of FTTP delivery model, but 300 dwellings for an alternate type of delivery model. However, the size threshold limit will also depend on whether there is a spatial requirement for certain on site infrastructure or alternatively, the site can be connected back to a centralised exchange that also serves other areas.

The topic is complex and is explained from a developer's perspective in the following section. What can be concluded from this analysis is that it is extraordinarily difficult to define one number as a size threshold limit that could be applied nationally across all development types. **The UDIA concludes therefore, that whilst a size threshold limit is easy to interpret from a regulatory compliance perspective, it is likely to be inequitable in its treatment of different development types and therefore a size threshold limit cannot be effectively utilised as a compliance criteria.**

- The **FTTP technical solution** for a site, provided by an independent FTTP provider (or alternatively by an NBN co designed solution architecture if the site falls outside the compliance threshold), will define certain space requirements for the required pit and pipe configuration, a communications head end or Fibre access node, fibre distribution hubs etc. For example, certain sized sites (such as urban infill sites) may not be large enough to accommodate the necessary on-site infrastructure to accommodate a communications room head end and would have to be connected back to some other interconnect point via backhaul.
- The **commercial assessment** as to whether FTTP is an affordable solution, relates in part to the type and cost of the product being developed such as affordable housing product or luxury apartments etc. There are a large number of factors that can influence this assessment including:
 - Cost of a FTTP solution
 - Geographic Location
 - Land Use
 - Site Size
 - Site Yield
 - Product Sale Types
 - Proximity to Infrastructure and Services

An outline of these criteria is described in the following section.

Cost of a FTTP solution

- Quotations provided by FTTP providers typically include:

- The capital cost of establishing backhaul to a site or a contribution towards this figure;
- The capital costs of establishing a FTTP network consisting of fibre, fibre network units and ONTs to each dwelling.
- The capital cost of establishing an onsite Telco exchange to provide a FTTP system (depending on the size of the development and the need for an exchange based upon the FTTP provider's alternate access to other suitable interconnect facilities);

Additional costs include:

- The capital cost of providing a passive pit and pipe network infrastructure. Sometimes this is provided by the developer and other times by the FTTP provider.

Geographic location

The geographic location of a site will often determine the price point at which residential products can be sold at. Influencing factors include postcode and general location described as:

- Inner urban
- Urban fringe
- Rural

Site Size

The size and zoning of the site will often determine what land use and site yield is possible e.g.

- Small site redevelopment sites
- Inner urban Infill sites
- Greenfield master planned communities sites

Land use

Different types of development products are common on Greenfield sites and the mix will affect the commerce of the project e.g.

- Mixed use developments (residential, commercial, retail, industrial, education etc.)
- Multi-unit dwellings (low cost affordable housing dwellings to luxury dwellings)
- Detached dwellings (low cost affordable housing dwellings to luxury dwellings)

Site Yield

The number of dwellings that can be developed on a site will be dependent upon local planning guidelines per site location. This determines how many dwelling types can be approved for a given location based upon various planning guidelines and yield formulas. The commercial assessment and feasibility of the development (i.e. profitability) will be largely driven by the yield for the site multiplied by the sale revenue per dwelling less the associated development costs (e.g. Infrastructure build, civil works and construction costs, overheads etc. etc.)

- High density
- Medium density
- Low density

Product Sale types

Development sales can be derived from a range of options including:

- Land only sales
- House and land sales
- Apartment sales
- Sales of lots to sub-developers (for either detached dwellings or multi-unit dwellings)

Proximity to infrastructure and services

The proximity and availability of existing infrastructures can influence the total cost of development for a given site. It is typical that prior to achieving planning and in some cases zoning approval, a development must be able to demonstrate that essential infrastructures and a broad range of community services will be available to residents such as:

- Power, potable water, non-potable water, gas, telecommunications, sewerage treatment, storm water treatment etc.
- Transport
- Community facilities
- Environmental site treatments eg. Wetlands preservation, fauna and flora preservation etc.

The commerciality of the development will depend on (and can be significantly affected by) how many of these infrastructures and services have to be provided for the site before planning approval can be achieved.

Cost Threshold Assessment

For reasons outlined later in this submission, the cost of backhaul should be removed from an assessment of the cost threshold. Therefore, it is assumed that the FTTP cost threshold per dwelling = FTTP network cost divided by the total no. of dwellings for the total development.

The cost of providing a FTTP network consists of:

- the capital costs of establishing a FTTP network consisting of fibre, fibre network units and ONTs to each dwelling;
- the capital cost of establishing an onsite Telco exchange to provide a FTTP system (depending on the size of the development and the need for one based upon the FTTP provider's access to other suitable interconnect facilities); and
- the capital cost of providing a passive pit and pipe network infrastructure. Sometimes this is provided by the developer and other times by the FTTP provider.

The total costs previously identified will usually depend upon the providers experience and capabilities and the geographic location of the site (that affects pricing such as: material transport costs, labour costs etc.) Defining a cost threshold limit will be reliant on industry benchmarks for the cost of a delivering a standard FTTP design.

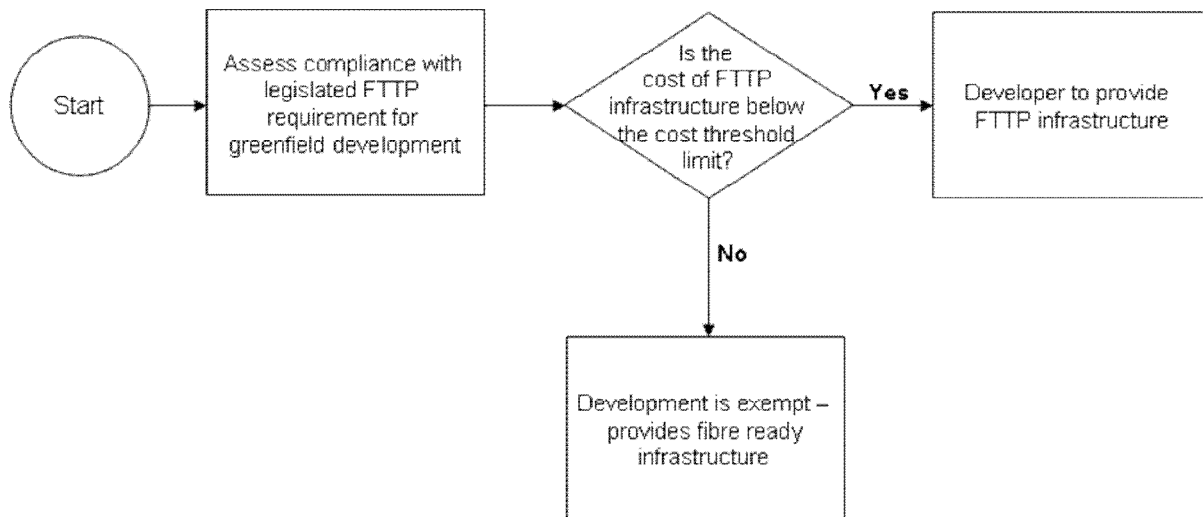
Currently FTTP costs vary from provider to provider and project type to project type based upon the requirements of the developer e.g. costs per dwelling for detached dwellings in a large development will differ from the costs per dwelling for a multi-story apartment building. Therefore, it is suggested that standardised pricing models need to be identified for each development type and at a minimum for detached dwellings and multi-unit dwellings.

This will then determine a cost threshold for each development type e.g.:

- \$3000 for detached dwelling sites
- \$2500 for multi-unit dwellings

The reference design used for calculating the costs per dwelling type should be based upon the same reference architecture used by NBN co. This will ensure a level of parity with the broader NBN project and can benchmark the costs against known costs in this program. The defined cost threshold limits would need to be reviewed and updated on a regular basis.

The assessment process for the cost threshold can be described as follows:



It is a fair assumption that if a development falls below a defined size threshold and that FTTP cannot be installed, then a 'fibre-ready' infrastructure should be required.

What will happen in developments where fibre will not be required because of either size or backhaul costs?

The assessment of a development to be exempt from providing a FTTP solution and fall back to being "fibre ready" will be dependent upon the following:

- an assumption that a telephone service provider will be available in the area (by default this falls to Telstra under their USO obligations.); and
- an assumption that the "fibre ready" pit and pipe infrastructure can also accommodate the immediate telco requirements as well as the future NBN co requirements.

Telstra's recent announcement to no longer deploy copper network infrastructure seriously complicates this issue. Even though developers can provide a "fibre ready" pit & pipe infrastructure, it appears they can no longer rely upon Telstra to provide a traditional copper network-based telephone service under the USO and at no cost to the developer. Telstra have indicated that they will potentially supply a mobile wireless handset to meet their USO obligations.

In addition to this, most residential customers have also become accustomed to the availability of broadband in areas where a copper based telephone service is available either via ADSL or ADSL 2+. Telstra's proposed plans also complicate this issue as customers would be restricted to the availability of mobile broadband providers in the location where there is the absence of a copper line back to a Telstra exchange.

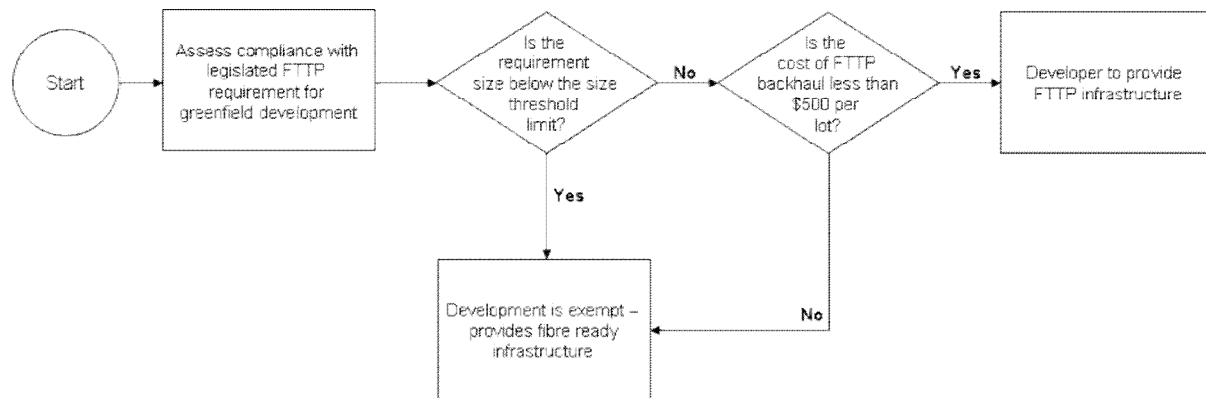
The cost of mobile broadband plans are typically at a much higher cost than fixed line broadband and the number of available providers are typically lower. Based upon feedback from many developments where there has been acknowledged issues with the availability of broadband, there can be significant adverse community reaction ranging from affected land and property sales to, in some cases, claims for compensation from the developer (especially from home based businesses). On a national scale, this could be a significant issue for the Government who have brought about the circumstances affecting this situation.

At what level should the backhaul threshold be set?

The cost of providing backhaul for most Greenfield sites is a significant portion of the costs associated with providing a complete FTTP solution. While distribution costs of a FTTP solution within a given development are fairly consistent, within a given range, backhaul costs can vary significantly based upon a range of factors, namely:

- distance from the nearest backhaul interconnect point to the site;
- commercial pricing of the backhaul provider;
- commercial terms offered by the backhaul provider to the FTTP provider;
- number of obstructions encountered on the backhaul route (e.g. roads, rivers, rail, other utilities);
- ownership of existing infrastructure that the backhaul may be required to use e.g. Pipes owned by other carriers or utilities;
- cost of access to existing infrastructure e.g. lease costs to other asset owners;
- initial connection costs to the backhaul provider; and
- service type availability of the backhaul provider;

The UDIA interpretation of this proposal by the DBCDE is summarised as:



The variability of backhaul costs makes it difficult for developers to effectively anticipate and plan for the cost of FTTP in a commercial assessment. The scope of backhaul provision can introduce a significant and unacceptable level of risk for a development.

UDIA contends that the cost of backhaul should be treated separately from the cost of fibre deployment. The UDIA considers that backhaul is part of a National Broadband infrastructure backbone that can potentially service multiple sites in both greenfield and brownfield developments and therefore should be considered an essential component of the National Broadband Network. Backhaul costs should definitely not be a cost that requires developer contribution and should be addressed by the NBN project.

Why not use a threshold that takes account of the proximity of backhaul?

UDIA contends that the proximity threshold concept as proposed is not workable. From feedback based upon multiple FTTP projects, it is apparent that the cost of backhaul is based upon multiple criteria and is based upon an assessment by the FTTP provider of factors such as those detailed earlier in the submission.

All of these factors result in a determination of:

- whether the nearest backhaul is suitable to the task
- whether the backhaul can be delivered to a schedule that suits the development requirements

- the up front capital cost of the backhaul charged to the developer.

Therefore, closer proximity does not necessarily equate to a lower cost of backhaul. The cost of backhaul also has to relate to the type of product being developed, so even though costs may be relatively low, it may still be uneconomical for low income affordable housing products for example.

The UDIA reiterates its recommendation therefore that:

- the management of backhaul request should be managed as an NBN co responsibility providing co-ordination amongst backhaul providers or through provision of infrastructure procured as part of their own network; and
- the developer's contribution to the cost of backhaul should be removed.

This proposed arrangement enables simplified commercial assessments for telecommunications infrastructure without the need for complex assessment criteria. It also encourages NBN co to facilitate competitively priced backhaul options across a broad spectrum of locations across Australia as per the objectives of the NBN project.

If there is to be a size threshold, what should it be?

For the reasons outlined earlier, the UDIA reiterates that it is extremely difficult to define one number as a size threshold limit that could be applied nationally across all development types. **The UDIA concludes therefore, that whilst a size threshold limit is easy to interpret from a regulatory compliance perspective, it is likely to be inequitable in its treatment of different development types and therefore a size threshold limit cannot be effectively utilised as a compliance criteria.**

3. START DATE

When should the fibre-ready requirement start to apply?

As previously indicated in this submission and previous submissions, an understanding of the true impact of the proposed Greenfields legislation will be dependent upon knowledge of:

- NBN co's deployment plans ie. When will they be deploying to certain areas;
- NBN co's technical solution design. (This affects spatial and planning requirements of a site to be 'fibre ready');
- availability of the NBN implementation study (currently pending release); and
- an industry agreement upon compliance thresholds.

All of the matters raised by the prospect of this legislation are relatively complex and require consideration based upon known variables. Currently there are more unknown variables than known variables. For example, NBN co are unable to define deployment plans or final technical solutions until further studies and trials are completed.

Once these solutions have been finalised, the design and cost impact of the NBN co. requirements for passive network infrastructure have yet to be assessed to determine whether they are higher or lower than typical passive network infrastructures deployed by developers. Therefore, it is difficult for the Development industry to achieve an informed consensus view that would fully support the legislation in the proposed timeframe.

The development industry cannot agree to the 'fibre ready' compliance date of 1 July 2010 until the 'fibre ready' requirements of the NBN co network architecture have been published. It is imperative that the NBN co. spatial requirements for the 'fibre ready' passive network infrastructure are known in

order to be properly allowed for in planning and cost analysis by the developer. This is essential to avoid any future costs associated with incompatibilities and associated reworks. The NBN co. 'fibre ready' design requirements need to be known well before any civil works stages and in Stage 4 or earlier. This is because the commercial impact of these requirements has to be considered by the developer and incorporated into their overall commercial assessment of the project.

When should the fibre requirement start to apply?

While it is acknowledged that notice may have been given to developers 12 months ago that it was the Government's intention to mandate FTTP by July 2010, what has not been made clear in any public manner to the development industry as a whole, is that the \$43B NBN project does not contemplate paying for any FTTP infrastructure in Greenfields developments that it proposes to legislate for.

It is inferred in all current discussions with the DBCDE that all costs associated with providing FTTP within the development boundary, and all costs associated with providing backhaul to the development site, are costs that must be met, in full, by the developer. This realisation has the development industry significantly concerned. As a result, it has on multiple opportunities, pointed out the inequity of this arrangement and is reacting to the relative haste of this change. In many cases developers are now only just being confronted with the reality of transitioning from paying \$0 for telecommunications infrastructure to potentially paying millions of dollars in costs to provide both backhaul and FTTP.

To allow for the effective transition to these new arrangements, it is critical that the proposed timing of compliance is set as early as possible in the planning lifecycle to allow for a proper commercial assessment of the impact that this proposed legislation brings about. Due to the high costs associated with fully funding FTTP it is anticipated that certain development sites may now be determined to be uncommercial to be developed or will need to claim exemption from immediate FTTP provision and be limited to provision of a 'fibre ready' telecommunications infrastructure.

It has been proposed that fibre ready compliance should apply to all developments receive 'Stage 4 approval after 1 July 2010'. However, by Stage 4 it is feasible that a commercial assessment of a development may already be complete and the developer may have attributed no cost towards the cost of FTTP telecommunications infrastructure or even a 'fibre ready' infrastructure. This could negatively impact the commercial assessment and feasibility of the entire project.

The previous Stage 3 is described as '*Negotiation of infrastructure levies and detailed structure planning.*' It is in this phase and earlier phases that appropriate budgets are allocated to the estimated costs associated with the development of the land, including all utility costs. All of these costs are included in a commercial assessment of the development which will indicate to the developer an anticipated yield and profit from the development.

The timing trigger for compliance for fibre requirement needs to be earlier than phase 4 to allow for an appropriate commercial assessment of costs by the developer.

Should the instrument contain detailed specifications?

Detailed specifications, covering both residential and non-residential premises, should be left to industry guidelines that are progressively developed and improved by an independent groups such as Communications Alliance or ACMA and not be specifically legislated for. This allows conditions to be kept in line with changes in technology without the need to redraft legislation.

Currently, the market is self regulating in that respect. Business grade customers typically seek and are willing to pay for certain qualities of services. How that service is delivered is determined by the service provider and is agreed upon under a Service Level Agreement (SLA) with the customer.

Typically the architecture of most FTTP deployments are able to cater for both residential grade and business grade services. NBN co. has also provided information indicating that the architecture of their network is also able to cater for these requirements².

It is almost certain that over time technology will change. Whilst the underlying distribution method will be fibre, both the active network components and the fibre cabling systems themselves will also most likely change. It is therefore not recommended that supporting legislation be put in place that goes so far as to specify specific technologies or specific fibre distribution methods.

Proposal 12 - That pending the finalisation of industry guidelines, codes and standards, as a safety net, the subordinate legislation provide broad outcome-orientated requirements, for both residential and non-residential premises.

The provision of outcome-orientated requirements, for both residential and non-residential premises appears to be reasonable as long as:

- there are published definitions of these requirements eg. An agreed definition of “any-to-any connectivity”; and

it removes reference to specific detailed technical requirements that may become outdated over time. Eg. Specific technical parameters behind a definition of “high speed Internet access”

² NBN Co Network and Operations Information Session, Sydney March 26, 2010.

Attachment B

UDIA Submission to the

Inquiry into The provisions of the Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010

Dear Committee Secretary

Thank you for the opportunity to provide comment on the provisions of the Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010.

The Urban Development Institute of Australia (UDIA) is the peak body representing the development industry in Australia.

The UDIA represents more than 4,000 companies directly employing more than 400,000 Australians including developers and a range of professionals involved in the development industry including lawyers, engineers, town planners and contractors.

The development industry is one of the major sectors in the Australian economy directly accounting for 7.3% of GDP and, taking into account the indirect impacts of the industry on the rest of the economy delivers an additional 6.2% of GDP.

The Australian development industry directly accounts for 975,700 (full time equivalents) employees (9.1% of the workforce) and a further 749,600 employees (7% of the workforce) in the broader economy. The industry directly contributes \$36 billion of Australian wages and salaries (6.7% of all wages and salaries).

The direct impact of \$1 million invested in the property development industry results in:

- 6.7 full-time equivalent jobs generated in the property development industry.
- State and federal taxes increasing by \$73,458.
- An addition of \$235,733 to wages and salaries.

Introduction

As the purpose of this legislation is to help implement the Government's policy that fibre-to-the-premises infrastructure should be installed in new developments that receive planning approval from 1 July 2010, the Bill is of vital interest to the development industry.

Consequently UDIA has been actively involved in discussions with the Government over this legislation, including as a member of the Government's Stakeholder Reference Group.

In general, the development industry is very supportive of the opportunity for improved telecommunications services to be made available in Greenfield sites offered by the NBN.

UDIA is also keen to see an accepted industry standard for the deployment of Fibre-To-The-Premises (FTTP) as soon as possible. Already, a number of developers across Australia have undertaken to implement FTTP in their residential developments.

In simple terms, the UDIA is of the view that the proposed FTTP be the modern replacement for copper and that its installation be treated in the same way as for the current installation of copper cables into the development areas, and onward to the premise. The UDIA is also of the view that the NBN project should align with the greenfields FTTP deployment requirements and share responsibility for deployment of FTTP in these locations.

The Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010 is essentially enabling legislation for the introduction of the NBN on new developments, with the key details regarding the implementation to be included in subordinate legislation.

Because of this, the legislation that is currently before the Parliament does not include or address the many of the major issues that UDIA and the development industry have in relation to the introduction of the NBN on Greenfield sites.

In short, the key elements of this legislation are still unknown.

This current lack of information regarding the legislation raises concerns in the development industry about a range of issues such as:

- the commercial effects of the proposed legislation upon developers and new homebuyers;
- the impact that the cost of FTTP will have upon affordable housing product;
- the availability of NBN funding to support the cost of implementing FTTP;
- the need for equitable treatment of residential customers in Greenfield and Brownfield sites;
- the practical details of the NBN rollout related to Brownfield and neighbouring Greenfield sites; and
- the potential impact of NBN Co implementation model upon existing FTTP providers who may already be delivering services to a number of our developers.

Without this information, UDIA is not in a position to provide support for the legislation. UDIA also believes that the legislation should not be debated by the Parliament without the accompanying subordinate legislation.

Consequently the focus of this submission is on the key elements that need to be addressed through the subordinate legislation, as opposed to what is contained in the legislation currently before the Parliament.

UDIA would appreciate the opportunity to appear before the Committee to discuss the contents of this submission in greater detail.

Yours sincerely



RICHARD LINDSAY
Chief Executive Officer

Key Issues

Costs and Equity

There is currently a lack of information regarding how NBN funding will be applied to Greenfield sites. Whilst it has been inferred in recent weeks by the Government that developers will be required to fund FTTP in greenfields sites, this is a position that has never been publicly stated by the Government.

This has created an environment of financial uncertainty for many developers who would be required to pay the upfront costs of installing FTTP in Greenfield estates. In many cases developers are now only just being confronted with the reality of transitioning from paying nothing for telecommunications infrastructure to potentially paying millions of dollars in costs to provide FTTP.

Due to the high costs associated with fully funding FTTP it is anticipated that certain development sites may now be rendered unviable for urban development or will need to claim exemption from immediate FTTP provision and be limited to provision of a 'fibre ready' telecommunications infrastructure.

UDIA strongly believes that should be no difference in relation to the treatment of new estates and the retrofitting of existing housing. It is highly inequitable for there to be an upfront capital charge for Greenfield estates but a cost-recovery approach for elsewhere.

This framework proposed by the Government will adversely impact on the cost of new homes, and would also result in the situation where new home owners would be required to pay for the provision of FTTP, whilst owners of existing homes would not.

The actual cost of providing FTTP to new houses in Greenfield estates varies depending on the nature of the development (eg. Single dwelling lots vs. Multi-unit dwellings), and other factors such as geographic location and the significant variance in the cost of associated backhaul.

However, current market evidence from our members indicates that cost can range from \$2,500 to \$5,000 per new dwelling as a development cost. The cost excludes the additional associated on costs incurred by the developer for activities associated with civil works, project management, contract management etc. whereby these numbers can almost double as a real cost that has to be passed on to the customer.

UDIA further notes that if FTTP infrastructure is to be provided by a developer in Greenfields estates, then under the NBN model, Internet Service Providers (ISPs) will be able to use this infrastructure to obtain a commercial benefit whilst making no financial contribution to the provision of the infrastructure.

The funding model for the NBN is still largely unknown.

The Government has costed the NBN roll-out at \$43 billion; however it is not known how this figure was derived and whether this figure includes Greenfields developments. It is also not known what impact the transition from copper to fibre will have on the operation and funding of the Universal Service Obligation (USO) fund.

UDIA is of the view that any revision of the USO to take into account the establishment of the NBN, may be a potential source of funding for the rolling out of FTTP in new developments.

Fibre-Ready Requirements

The legislation provides that new developments be fibre ready by 1 July 2010.

The development industry cannot agree to the 'fibre ready' compliance date of 1 July 2010 until the 'fibre ready' requirements of the NBN co network architecture have been published. It is imperative that the NBN co. spatial requirements for the 'fibre ready' passive network infrastructure are known in order to be properly accounted for in planning and cost analysis by the developer.

This is essential to avoid any future costs associated with incompatibilities and associated reworks. The NBN co. 'fibre ready' design requirements need to be known well before the commencement of any civil development works. This is because the commercial impact of

these requirements has to be considered by the developer and incorporated into their overall commercial assessment of the project.

Currently there is a lack of knowledge regarding:

- NBN co's deployment plans ie. When will they be deploying to certain areas;
- NBN co's technical solution design. (This affects spatial and planning requirements of a site to be 'fibre ready');
- availability of the NBN implementation study (currently pending release); and
- an industry agreement upon compliance thresholds.

All of the matters raised by this legislation are relatively complex and require consideration based upon known variables. Currently there are more unknown variables than known variables. For example, NBN Co are unable to define deployment plans or final technical solutions until further studies and trials are completed.

Once these solutions have been finalised, the design and cost impact of the NBN Co. requirements for passive network infrastructure have yet to be assessed to determine whether they are higher or lower than typical passive network infrastructures deployed by developers. Therefore, it is difficult for the Development Industry to achieve an informed consensus view that would fully support the legislation in the proposed timeframe.

Telstra Response to Legislation

In response to this legislation, Telstra recently announced that it has changed its policy in regard to the installation of telecommunications network infrastructure in Greenfields developments.

According to the statement on the Telstra website:

"For developments where the developer has not made arrangements to have FTTP infrastructure installed, Telstra will no longer deploy copper cable. Additionally, Telstra may require a developer to pay a contribution towards the cost of the installation of any telecommunications infrastructure in Greenfields developments, including fibre."

This announcement has the potential to render the 'fibre-ready' requirement in the legislation essentially meaningless, and has created a situation whereby commercial realities are likely to over-ride the intent of the legislation.

Even though developers can provide a "fibre ready" pit & pipe infrastructure, it appears they can no longer rely upon Telstra to provide a traditional copper network-based telephone service under the USO and at no cost to the developer. Telstra have indicated that they will potentially supply a mobile wireless handset to meet their USO obligations.

In addition to this, most residential customers have also become accustomed to the availability of broadband in areas where a copper based telephone service is available either

via ADSL or ADSL 2+. Telstra's proposed plans also complicate this issue as customers would be restricted to the availability of mobile broadband providers in the location where there is the absence of a copper line back to a Telstra exchange.

The cost of mobile broadband plans are typically at a much higher cost than fixed line broadband and the number of available providers are typically lower. Based upon feedback from many developments where there has been acknowledged issues with the availability of broadband, there can be significant adverse community reaction ranging from affected land and property sales to, in some cases, claims for compensation from the developer (especially from home-based businesses).

Ownership and Provision of Assets

As outlined above there is currently a lack of technical resolution and information available on the NBN model and the ownership of assets.

For example, it is still uncertain how far the NBN network will extend into Greenfield sites, and also who is responsible for the provision of back-haul into Greenfield sites.

UDIA contends that developers should only be responsible for providing the trench for the fibre infrastructure (pit and pipe), and the NBN project should assist with financial support for the installation of the pits and pipes, the backhaul, the head-end and all of the cabling into homes. UDIA considers that the way in which FTTP is delivered should not differ at all from the way in which telecommunications infrastructure is delivered into new estates (residential and commercial) and new apartments now.

The cost of providing backhaul for most Greenfield sites is a significant portion of the costs associated with providing a complete FTTP solution. While distribution costs of a FTTP solution within a given development are fairly consistent, within a given range, backhaul costs can vary significantly based upon a range of factors, namely:

- distance from the nearest backhaul interconnect point to the site;
- commercial pricing of the backhaul provider;
- commercial terms offered by the backhaul provider to the FTTP provider;
- number of obstructions encountered on the backhaul route (e.g. roads, rivers, rail, other utilities);
- ownership of existing infrastructure that the backhaul may be required to use e.g. Pipes owned by other carriers or utilities;
- cost of access to existing infrastructure e.g. lease costs to other asset owners;
- initial connection costs to the backhaul provider; and
- service type availability of the backhaul provider;

The variability of backhaul costs makes it difficult for developers to effectively anticipate and plan for the cost of FTTP in a commercial assessment. The scope of backhaul provision can introduce a significant and unacceptable level of risk for a development.

As outlined in the MBA submission to this inquiry, backhaul for some developments has cost \$400,000 - \$700,000 or more depending on circumstances. This cost would also need to be recovered on a lot by lot basis and have a serious impact on building and housing affordability.

Therefore UDIA strongly contends that the cost of backhaul should be treated separately from the cost of fibre deployment.

The UDIA considers that backhaul is part of a National Broadband infrastructure backbone that can potentially service multiple sites in both greenfield and brownfield developments and therefore should be considered an essential component of the National Broadband Network. Backhaul costs should definitely not be a cost that requires developer contribution and should be addressed by the NBN project

Timing

The legislation is scheduled to come into effect on 1 July 2010; however UDIA believes that this deadline is unachievable.

As outlined above, there is still a significant lack of knowledge in relation to NBN co's Network deployment plans and technical specifications, as well as the ownership and cost implications of the FTTP provision in Greenfield developments.

Also, under the current available legislation, it is uncertain which developments will be required to adhere to the FTTP provision and which are exempt.

Until all this detail is known, it is extremely difficult for the development industry to undertake the necessary planning requirements for the provision of FTTP under the NBN model.

Decisions in relation to the provision of FTTP are usually made a number of years in advance of subdivision work and are based upon cost calculations that are made as a part of a commercial assessment for the development. The current commencement date will not allow adequate time for the planning to be undertaken and may also result in an unfavorable commercial assessment with the addition of the FTTP costs.

The recent Telstra announcement has also created further confusion for the development industry in regard to FTTP provision.

Evidence from a number of our members has indicated that Telstra have advised that they will no longer deploy copper in a Greenfield site and the alternatives are either a

contribution per lot towards the cost of a FTTP solution or a minimal Wireless phone handset solution under the requirements of the USO.

Therefore unless a developer has already made planning allowances for the provision of FTTP into a Greenfield estate, it would be extremely difficult to comply with the 1 July 2010 start-date.

Consequently, UDIA strongly recommends that a moratorium on the start date for this initiative be implemented until such time as there is significantly greater certainty and detail regarding the technical and financial aspects of this legislation.