



**Submission to
NBN Fibre to the Premises
in Greenfield Estates**

**Rosemary Sinclair
Managing Director
12 June 2009**

ATUG is responding to the Greenfields consultation to ensure end users needs are reflected in the policy and technical developed to support the NBN goal of fibre to 90% of Australian premises within an 8 years timeframe.

ATUG notes that this is in the context of the Government recognising the critical importance of future telecommunications regulatory settings, including ongoing consumer safeguards, **to ensure the best outcomes for all Australians and the competitiveness of the economy.**

The component parts of the NBN – greenfields and brownfields, CBD, urban, regional, rural and remote – must all reflect the critical importance of the NBN infrastructure to end users – this will be the core communications platform on which many other initiatives, in the transformation of Australia’s entire economy to a Digital Economy, will depend.

ATUG’s central concerns for the NBN remain:

- Policy Objective
- Affordability
- Choice
- Equivalence – in practice
- Customer Experience
- Ubiquity

ATUG’s key suggestions are

- The **Policy** objective for the NBN regulatory framework and any supporting legislation, regulation, education must remain, the Long-term Interests of End Users.
- **Affordability** is key to take-up. Regulation should support a cost effective, high quality build. Competition is the strongest tool for delivering affordable prices – network design must enable competition at the lowest level feasible. An entry level “safety-net” package must be available to ensure maximum take-up.
- **Choice** – network topology is central to competition and choice. Designs that foreclose competition should not be accepted. When infrastructure competition is not possible, service competition based on open access and equivalence must be possible.
- **Equivalence** in practice – can only be assured by a new and independent body, NBN Australia, with the task of implementing the Open Access and Equivalence Frameworks for Australia’s NBN
- **Customer Experience** in the NBN environment must be managed for success, from the “wall to the world”, from the initial connection (Greenfields) or migration (Brownfields) through service contracting to service switching and repair experiences. Service quality and security standards must reflect the key role of the NBN in the lives of all Australians.

- **Ubiquity** – all Australians must be connected to the NBN. Ubiquity is not only about network availability but also about affordability and accessibility. When all Australians are connected to the NBN, the real potential of this capability for productivity, growth and innovation will be open to end users in all parts of the economy and community, and in all regions of Australia.

Member Discussions on NBN Issues in June 2008

These were held in Melbourne, Adelaide, Sydney, Brisbane and Perth. The outcomes and suggestions from these discussions which are of relevance to the Greenfields consultation are listed below against each of ATUG's central concerns.

Policy Objective for the NBN Regulatory Framework

- The “long-term interests of end users” as defined in the Telecommunications Act and Trade Practices Act should remain the core objective for telecommunications policy and regulation in Australia.

Affordability – The National Broadband Network will not achieve the right outcomes for Australia if end users cannot afford to pay for it.

- Competition is seen as the key mechanism to ensure affordability. Competition will need to be “designed in” at the earliest stages of NBN design and planning. This may require Government legislation.
- Prices for end users should reflect reasonable rates of return, with the ACCC under the Trade Practices Act, continuing to have a role in access prices, even if there is commercial agreement, to ensure prices are reasonable. Access prices should reflect real costs of construction and reasonable returns for private investors and government.
- Regulation may be needed to encourage co-ordinated use of existing fibre assets, access to ducts, poles, pits and other physical plant, access to rights of way and other means to ensure efficient construction of the NBN. Carrier immunities and powers may have to be reinstated to enable timely and affordable services.
- Co-ordination through Local Government and with property developers will be needed to ensure new estates are connected to the NBN with affordable services available for end users. Uniform planning and environment guidelines should be developed to be applied by Local Councils.
- NBN should support State Government and regional community initiatives to develop local broadband Networks which would then interconnect with the national NBN. Uniform, consistent and widely promulgated standards are needed to ensure inter-operability.
- ATUG would like to see regulatory support for an affordable “entry level” product to ensure all Australians can access the NBN. This

idea could be modelled on the product requirements for Australian Broadband Guarantee suppliers although income disparity between metro and regional areas will need to be taken into account.

Discussion Points on Affordability relevant to Greenfields:

- Ways of reducing build costs; carrier powers and immunities; access to physical infrastructure; infrastructure sharing
- Maximum opportunity should be taken to utilise existing physical infrastructure, eg, towers, poles, pits, ducts, on an “equitable” basis so as to reduce cost and environmental impact.
- A code of practice to address construction practices should be developed by an industry body and registered with and compliance monitored by the Australia Communications and Media Authority as was the case before cabler de-regulation. When standards are widespread and working, it may be possible to review this approach.

Choice

- Competition remains a key outcome for ATUG. Where possible, infrastructure competition is preferred. Where this is not possible service competition is preferable to monopoly and must be mandated.
- While policy settings should encourage the development of multiple fibre operators, it is likely that many parts of Australia will only support investment in one fibre network – built by different builders in different locations. All ATUG comments about open access apply to any fibre network builder, including existing fibre assets where they become part of the NBN.
- Network design is key to ensuring the possibility of service based competition over fibre networks where only one network is economically efficient. Legislation requiring an NBN designed for competition is essential.
- Legislation is needed to ensure Open Access arrangements are supported in Greenfields builds. Construction designs and standards must support equivalence of access prices and non-price terms and conditions and arrangements for allowing access seekers to differentiate their service offerings to customers.
- ATUG prefers access arrangements for the NBN to be supported through the Trade Practices Act to avoid legal battles of interpretation. The ACCC should have access pricing powers for the NBN under the provisions of Part XIC and anti-competitive conduct powers under Part XIB. The powers under s46 of the Trade Practices Act are not considered strong enough to ensure open access of the NBN.
- Access pricing processes for the NBN need to be much more timely and certain than access pricing process for existing fixed network services. This may mean appeal rights are truncated for a period. It

may mean a power for the ACCC to amend undertakings where they are unreasonable. It may mean expedited arbitration hearings.

- An independent stakeholder body should be given the role of ensuring Standards are developed, promulgated and complied with on a national basis. There may be a role for Standards Australia in this work.

Equivalence Implementation and Oversight – “NBN Australia” – a new stakeholder group

- Strong incentives have to be put in place to make NBN Australia an effective industry-led body focused on good, commercial outcomes for end users and industry players. The role of the existing formal regulators and the Minister in providing such incentives will be important. ALGA and Standards Australia could also contribute to the Stakeholders Group.
- The migration task associated with the roll-out and cut-over of all broadband users to the NBN in Greenfields or Brownfields is a huge project requiring commitment over many years. Construction Guidelines in Greenfields areas should reflect this fact – assets will need to be preserved in good condition until end users are connected.
- ATUG would see a role for end user participation in the NBN Stakeholder Group.

NBN Customer Experience

NBN Service Framework

End users will be heavily dependent on NBN services. High reliability and high quality infrastructure and maintenance must be provided. It is essential to clearly specify all of the appropriate service characteristics offered by the NBN including reliability and availability and restoration times and provide a strong monitoring and compliance regime. Minimum aggregation ratios such as 10:1 or less for consumer and 5:1 for small business. End users should have 80% of their speed for 80% of the time.

Distinct Business and Domestic services need to be available with clear and measurable service capabilities. ATUG members support the concept of Quality and Performance Regulation/Standards as a means to ensure high quality performance for end users.

The FTTP NBN must be dimensioned for a wide range of services including e health, distance education and general business needs as well as entertainment and IPTV needs.

The NBN should be considered to be an ‘innovation platform’ with a strong focus on open and interoperable standards, peer to peer working requiring symmetrical services, network neutrality and a capability to accommodate IPv6.

A High Quality NBN

The NBN design should aim to improve the performance and security of NBN services beyond the current “best endeavours” basis. If the NBN is to be used to “transform” education, health care, business practice, government service delivery, communications and entertainment it is essential that the NBN offers the highest reliability and quality of service. The target should be 99.99% reliability and repair times well within existing CSG standards.

Clear and high quality construction and installation standards and codes of practice must be developed and complied with and strong monitoring and compliance arrangements are required, including “last metre” cabling practices and cabler accreditation.

High quality infrastructure documentation recording the location of all cables in a standardised format must be established and maintained. Underground NBN infrastructure must be effectively ‘identified’ to mitigate against inadvertent damage.

The codes of practice to address construction and installation practices should be developed by a group such as Standards Australia with compliance monitored Local Government planning departments. This may require further development of telecommunications skills in Local Government authorities. This should cover both underground and above ground construction technologies, as well as placement of “low impact” masts for wireless last mile connections. National Telecommunications Training Packages should be updated by IBSA (Innovation Business Skills Australia) to reflect the national FTTP standards. Cabler accreditation and registration will need to be reviewed to ensure all work is of the highest quality – reflecting the core of the NBN in the lives and work of all Australians.

Customer Migration

Customers need to be informed about plans for migration to the NBN with sufficient time and options to make fit for purpose choices. The many lessons learned from the CDMA shut-down should be applied to ensuring a more satisfactory experience for NBN migration e.g., effective equipment, accessibility options, affordable entry services, staff training, customer information programs. Many of these consumer and business awareness activities could be managed through NBN Australia.

Legislation should require the establishment of an Industry Code of Practice to set out rules and processes for the fair and

reasonable transfer of a customer from one provider to another provider. Effective customer switching practices are key to effective market competition.

Customer Information

There is a need to begin an Information Campaign to explain the NBN to all Australians – similar to the Digital Television Switchover campaign. This should be included in Greenfields planning. The importance of take-up to the economics of the FTTP NBN provides a strong commercial basis for this campaign.

Legislation should require the establishment of an industry developed “NBN Customer Service Standard” for a minimum set of standardised customer focused data describing the characteristics of a particular service, including aggregation ratios and the speed performance delivery standards. Customers need clarity on what speeds WILL be delivered by NBN services rather than what speeds MIGHT be delivered. The Australian Broadband Guarantee program speed testing measures may provide a model for a widely adopted performance tool.

Compliance

Legislation must require all industry participants to enter into a formal legal agreement with the appropriate Industry Regulators to comply with applicable Industry Rules and Codes of Practice.

Ubiquity of Australia’s NBN

The real benefit of the NBN will be achieved when ALL Australians can be connected. The transformation of business, government and community services and activities that could be possible with Next Generation Broadband can only be achieved with ubiquitous coverage.

From an end user perspective connectivity must be assured from “from the wall to the world”. Any-to-any connectivity remains a key end user requirement. Inter-operability of services is important in the implementation of the NBN and should be reflected in the standards developed for equipment and construction of the parts built in parallel and by many parties which will make up the national NBN.

The USO should be extended to include broadband but by way of a Government backed Guarantee rather than an industry obligation. The Guarantee should be an Australian Communications Guarantee including Voice* and Broadband, where Voice* means Voice and Voice Equivalence.

Lifeline service (battery back-up) and access to 000 (Emergency Service) should be made available through the FTTP NBN in Greenfields areas.

Specific Comments on the DBCDE Greenfields Paper.

Purpose of this paper

One of the immediate steps the Australian Government announced was that fibre to the premises (FTTP) infrastructure would be required in greenfield estates that receive planning approval after 1 July 2010.

Related processes

The reform options that the Australian Government is considering are canvassed in the regulatory discussion paper, *National Broadband Network: Regulatory Reform for 21st Century Broadband* and submissions are due by 3 June 2009.

Any changes to the regulatory framework resulting from this process will take into account the Australian Government's new greenfield fibre policy. On the other hand, where relevant, changes resulting from that regulatory review process may apply to service providers operating FTTP networks in greenfield estates.

The Implementation Study is also relevant to the implementation of the greenfields policy.

The goal: fibre in greenfield estates

It will be important that FTTP networks are configured in such a way that they can:

- be upgraded to meet future requirements,
- facilitate any-to-any connectivity (i.e. the ability to communicate with other people connected to the network and other networks) and
- support multiple retail competitors.

ATUG: other important objectives are: to provide affordable services and to ensure very high levels of redundancy and quality, given the "single point of failure" nature of a FTTP service from an end users perspective

Policy rationale

The rationale underpinning the Australian Government's greenfields policy has been welcomed by a range of stakeholders including the Australian Telecommunications Users' Group and the Australian Local Government Association. The Online and Communications Council has also endorsed a strategy of '*promoting consistent and cohesive planning guidelines for state and local government authorities, and effective infrastructure implementation, that facilitates the efficient deployment of broadband.*' The Australian Government's FTTP in greenfields policy aims to support this strategy.

ATUG: National planning guidelines are essential in creating a national platform to support the transition to a Digital Economy. These guidelines should be developed with State, Territory and Local Governments.

Recent Australian developments

In parts of Australia the private sector is already moving to install FTTP networks in new greenfield estates.

Additionally, local government and planning agencies are encouraging developers to install FTTP infrastructure and services in new estates through various means.

The Australian Government would not wish to discourage such developments, and will work with all levels of government to promote consistency of requirements around installation of FTTP in greenfield estates.

ATUG: notes the mention of various guidelines including the current consultation in NSW on the NSW Telecommunications Facilities Code including Broadband, June 2009. ATUG has supports a ubiquitously available National Broadband Network. From a business user perspective it is important that Fibre to the Premises networks are built to nationally consistent specifications and standards to support branch operations, remote working structures and diverse and dynamic supply chains. Networks should be built with inter-operability standards built-in. National consistency will only be achieved if standards are developed and applied.

The costs and benefits of providing telecommunications in greenfield estates

The available information, including on international experience, suggests that consumers in new greenfield estates place a high value on the availability of FTTP and that this translates into higher capitalised house and land values compared to if legacy communications infrastructure is made available.

Delivering FTTP technology in greenfield developments

The model which is adopted for the implementation of the fibre in greenfields initiative will be applied on a national basis. Therefore, greenfield estates in Tasmania will be subject to the same regime as the rest of the country, notwithstanding the early rollout of the NBN in that state.

Broadly, there are two potential models to ensure that FTTP infrastructure is installed in new greenfield estates that receive planning approval from 1 July 2010:

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.

Questions

1. What are the relative merits of the models outlined? Which is

the preferable approach? Why?

ATUG: Despite the clarity which has emerged on the cost/benefit of Fibre to the premises in Greenfields Estates, it is still the case that some developers are not installing fibre to the premises. Given the outlined confusion of responsibilities, a clear requirement for fibre to the premises as the communications standard needs to be stated. It may be that this could be done by requiring Greenfield estates to meet an Australian Standard for Communications Connectivity. This standard could be developed by all relevant players and responsibilities agreed as part of the Standard development process. Standards Australia could be an appropriately broad based body for this work. This standard could then be used by Councils in approval processes mandated for planning, development and construction. ATUG is aware that the FTTH Council Asia Pacific in its submission to the NBN Regulatory Discussion Paper suggested a flexible approach in fibre deployment design to allow account to be taken of local conditions eg business vs residential requirements, density, location among other elements. ATUG supports this approach to flexibility to ensure user needs including for affordability can be accommodated. Government policy of 100Mbps would provide a context in which flexibility could be supported.

Role of government

If model 2 is adopted, the Australian Government would work with state, territory and local governments to include requirements to facilitate the deployment of optical fibre in greenfield estates. Even if model 1 were adopted there may still be an important role for state, territory and local governments in providing clarity to developers and other stakeholders given their close engagement with them.

ATUG: believes there is an important role for State Governments and Local Governments through their planning and certification roles in the deployment of the FTTP NBN. Only a nationally consistent and well co-ordinated approach will enable the NBN goals of 90% FTTP within 8 years to be achieved. The construction task ahead of Australia is unprecedented and will only be delivered through effective co-ordination between many parties.

To assist with the implementation of this national initiative, the Australian Government could work with state, territory and local governments on the development of planning laws, bylaws and planning guidelines. The Australian Government could undertake a range of measures to support the implementation of such requirements, such as:

- assisting with the development of model laws, templates for planning requirements and network and in-building cabling specifications for use by planning authorities
- facilitating the development of national guidelines for network design, and
- developing educational tools for relevant industry participants, builders and consumers on the new requirements.

ATUG: supports this approach with the involvement of professional bodies, industry groups and other stakeholders including property developers and construction groups. The use

of Stakeholder Groups by DBCDE in CDMA Switch-off and consumer representation provide quick input on a range of issues and a model for progressing practical NBN FTTP issues.

In addition to assisting local councils and planning authorities, the development of such tools could help provide consistent requirements between local government areas, reducing compliance costs for developers who work across council boundaries.

State and territory planning laws could require developers and builders, as appropriate, to ensure:

- pit and pipe infrastructure is installed that would be appropriate for the deployment of FTTP and which, potentially, would allow competitive infrastructure provision in the future (for example sufficient space for more than one cable)
- appropriate FTTP infrastructure is installed ready for connection to new premises
- appropriate cabling is installed within new premises to allow practical use of FTTP capability
- open access wholesale services are available on a nondiscriminatory basis, and
- retail services are available from at least one retail provider.

ATUG: would add measures to protect and preserve assets until they are taken up by end users. The paper by Eckermann and Associates on Provision of Broadband in Greenfields areas outlines in detail all aspects of physical construction that need to be included in these standards and planning laws.

Large greenfield estates often include commercial centres, schools, medical clinics and other community facilities which may need higher grade services than residential customers. The Australian Government considers ehealth and eeducation will be important users of superfast broadband. Planning requirements may also need to ensure the FTTP requirements of such users are factored into developers' and service providers' planning.

ATUG: supports this approach. It is important that the different needs of end users can be met by the NBN.

Questions

2. Is any action required by the Australian Government to facilitate local councils and planning authorities requiring the installation of FTTP facilities? **ATUG:** A national approach is essential but should be developed with local input to reflect local conditions.

3. Would the preparation of model laws, templates and/or national specifications or guidelines assist local councils and planning authorities with implementation? **ATUG:** A national approach is essential but should be developed with local input to reflect local conditions.

4. Would the development of educational tools for industry assist? If so, what? **ATUG:** The Telecommunications Training

package should be updated by IBSA, the relevant Industry Skills Council

5. Would the introduction of a certification system for the installation and performance of FTTP networks be beneficial?

ATUG: this is essential given the practical experience of ATUG members and particularly in the early stages of moving to an NBN environment. Quality construction and installation is very important to end users experience of the NBN.

6. To what extent is a nationally coordinated approach preferable to one where state and territory or local governments take the lead?

ATUG: end users prefer a nationally agreed approach to ensure consistency, with implementation responsibility at a more local level.

With FTTP, battery backup systems need to be provided for lifeline services in the event of power failure. It would need to be made clear who is responsible for maintaining and testing batteries. This responsibility is likely to rest with consumers, the same way that it does with other safety equipment, such as fire alarms and smoke detectors.

ATUG: a consumer information campaign will be needed to ensure the new approach to lifeline service is understood by all – similar to the campaign on smoke alarms. There may be a need for on-going support from service providers to ensure end users remain focused on this issue.

Questions

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?

ATUG: end users see the build best described as “from the wall to the world”. Lead-ins should be provided at the time an estate is developed. If service connections are to be made when customers take-up services, it is important that plant is maintained in good order over time to allow for quality connections at later dates. If contractors are accredited it should be possible to ensure high quality work by parties other than the original FTTP infrastructure provider.

Questions

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?

ATUG: the NBN goal is 90% of all premises in 8 years. All

Greenfield developments should require fibre.

Questions

11. Are there any special requirements for multidwelling 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?

ATUG: the NBN goal is 90% of premises connected with fibre. All new premises in estates should be connected. Multi-dwelling buildings or office blocks may require higher capacity fibre to enable 100Mbps to each end user premise. In-building construction must reflect the commitment to open access and equivalence for all service providers to ensure maximum choice for end users.

Fibre to the premises

FTTP networks in greenfield estates should be capable of providing up to 100 Mbps over each connection and be upgradeable and scalable. A clear upgrade path to faster speeds is considered desirable. It is also expected that business grade services would be available to commercial and other relevant premises within estates.

The Australian Government is disposed to allowing providers flexibility as to how these outcomes are achieved. At the same time, however, it wants to ensure FTTP rollouts are future proof and interoperable and have a high degree of consistency across Australia. As noted above, the Australian Government could look at introducing templates, specifications or guidelines to this end.

ATUG: agrees the goal is 100Mbps for each connection and that upgrade capability should be built-in. Business Grade services will be necessary and distinct from residential services. The suggested approach to ensuring consistency while allowing for flexibility is supported. Industry and professional bodies should be able to contribute to the development of suitable templates, guidelines, standards, certification tools to able good outcomes. Suitable backhaul arrangements must be provisioned at the time of FTTP development for both Greenfield and Brownfield sites.

Questions

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?

Exemptions

The Australian Government acknowledges that there may be certain circumstances where it may be necessary to provide exemptions to the requirements for FTTP networks in greenfield estates. It is envisaged that

the proposed arrangements could be constructed to give States or Local Councils some discretion in their planning approval process concerning the classification of developments as greenfield estates and the type of line links that can be installed. The Australian Government recognises that any exemptions may be more applicable in areas outside the fibre footprint of the NBN.

Questions

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)?

ATUG: in any circumstance where estate are exempted from FTTP requirements, NBN standard wireless or satellite services must be provided. WA Government has experience in providing advanced services to remote communities that suggests that exemptions should be very rarely required. The issue in such areas has been the provision of backhaul services FROM the community into the communications network.

Commencement date

The Australian Government has indicated that the requirement to install FTTP in greenfield estates will apply to developments which receive planning approval on or after 1 July 2010.

Questions

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?

ATUG: The requirement for FTTP in Greenfields estates should be applied immediately to achieve the goal of 90% of premises within 8 years and to avoid retro-fitting costs.

Competition and regulatory framework

The Australian Government wants to continue to encourage trends towards private investment in FTTP in greenfield estates. Therefore, it is not the Australian Government's intention that the NBN overbuild FTTP deployments in greenfield estates where these estates enjoy outcomes comparable to those to be delivered by the NBN. The Implementation Study will examine how the Australian Government can work with existing FTTP providers in greenfields.

In the longer term it might well be that the NBN company would compete with other providers for the contract to supply FTTP infrastructure and wholesale services in greenfield estates. This however, would be a matter for the NBN company.

Questions

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?

ATUG: evidence suggests the economics of fibre networks only work if there is one such network, except in very densely populated markets of CBD environments. ATUG would prefer pit/pipe/conduit infrastructure standards to leave open the possibility of fibre competition in these markets. For the majority of areas only one fibre network will be economically viable and where this is the case, open access and equivalence obligations should apply. On the other hand access to content services may be required to ensure attractive service packages for end users.

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?

Competition at the services layer: access and equivalence

Given the likelihood that infrastructure based FTTP competition in greenfield sites may be limited, particularly in the short to medium term, the Australian Government wants to ensure that there is genuine open and equivalent access to wholesale services on bottleneck infrastructure in both new and existing greenfield estates. This includes access to wholesale services on equivalent price and nonprice terms and conditions. This will promote effective competition and choice in the delivery of services which will lead to better outcomes for consumers in these estates.

From the perspective of ensuring a competitive environment, the Australian Government does not consider that developers or FTTP service providers should be able to insist on exclusive wholesale or retail arrangements in greenfield developments which restrict entry of alternative providers. The Australian Government considers that customers are keen to have a choice of retail providers and are critical where developments do not have this feature.

ATUG: supports this position. Greenfields FTTP developments should mirror the NBN model – wholesale only infrastructure company with no incentives to discriminate in favour of its own retail division and consistent open access and equivalence obligations. All end users must have the same possibility for choice of service provider. All services providers must have access available to the

national market of end users.

Open access arrangements

To facilitate service-based competition, at a minimum, carriers providing FTTP services in greenfields would be subject to the access framework (as they potentially are now) set out in Part XIC of the *Trade Practices Act 1974* (Trade Practices Act). Any reforms made to Part XIC as part of the current review process would necessarily have regard to the operation of the new greenfield requirements.

Under Part XIC, the Australian Competition and Consumer Commission (ACCC) can declare services provided over FTTP networks if declaration is found to be in the long term interest of end-users, thereby subjecting them to open access arrangements.

In the case of a FTTP network in a greenfield estate, this may, for example, require the declaration of a new bitstream access service which would allow retail providers to configure their services as desired, or resale type services which could include services providing voice, data (internet) or multicast video. Intermediary wholesale providers could also access such services, repackage and onsell them. Any relevant declaration by the ACCC could apply to existing FTTP networks in greenfield estates as well as new ones, addressing concerns about access to existing FTTP networks.

An alternative approach could be to legislate that all FTTP greenfield networks are open to access by all access seekers as a matter of course. This could occur through the identification of appropriate services for the purposes of Part XIC, for example, under statute or a new type of subordinate instrument. Terms and conditions of access could then be determined through the processes applying under Part XIC.

We welcome proposals on possible alternative access arrangements for greenfield estates but note that these would be considered in the context of the broader regulatory review. A matter that would need to be considered is whether multiple access regimes could emerge that could prove difficult and costly to administer.

ATUG: supports the development of access and equivalence obligations in any case where fibre to the premises is a “bottleneck” asset. ATUG prefers the use of the Trade Practices Act telecommunications provisions because of the focus on the Long-term interests of end users and the well settled law in this area. ATUG’s submission on Regulatory Issues covers additional comments in regard to the powers of the ACCC. In general ATUG prefers access options to include at lowest possible level but supported by options for services based competition. Access to fibre to the premises for service providers should be mandated without the usual declaration process. A minimum set of price and non-price terms and conditions should be developed at an industry level rather than by bi-lateral negotiation. Parties can negotiate “better” terms on a commercial basis.

Equivalence

In addition to services being accessible to access seekers, the Australian

Government considers that access needs to be provided on equivalent terms so that all access seekers can compete on an equal footing in the retail market. This is a central theme in the Australian Government's overall NBN reform package.

An alternative approach would be to allow FTTP network operators in greenfields to also operate in the retail market providing there is an effective regulatory framework in place to ensure that all retail providers can receive equivalence of access. Suitable arrangements could be developed as part of an integrated package that could be put to developers by prospective FTTP providers. In Canberra, for example, TransACT has deployed FTTP and also provides retail services on the network, while offering access to other retailers.

While an integrated model may offer benefits to the operator, it will not necessarily guarantee wholesale services are provided on an equivalent basis as the FTTP network operator has the incentive to favour its own retail business.

The Australian Government will consider submissions from interested parties on how equivalence in greenfields can best be achieved.

The Australian Government recognises that a number of FTTP providers that have already rolled out FTTP networks in greenfield estates also provide retail services to consumers in these estates. In addition to TransACT, for example, nationally, Telstra has deployed FTTP in some greenfield estates where it delivers its Velocity service package. A question for consideration is whether new equivalence requirements being considered as part of the broader regulatory review could become relevant to these networks as the Australian Government on the basis that it is important consumers in these estates also enjoy the full benefits of competition.

ATUG: supports this position on the basis that all end users should enjoy access to competitive services delivered over the FTTP networks. Clear separation between wholesale and retail businesses is a fundamental requirement for effective competition.

Questions

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? **ATUG:** supports use of Part XIC specific provisions.

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? **ATUG:** Access should be declared without an inquiry – the model being the NBN approach of a wholesale only company with open access and equivalence obligations. This approach has already been decided as best way to meet the long-term interests of end-users.

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?

ATUG: the Government has identified a structural problem where wholesale and retail activities are combined. This problem was one of the reasons outlined for development of the NBN as now proposed – wholesale only with access and equivalence obligations to support effective competition. This structure should be applied in greenfields FTTP projects. The open access and equivalence obligations determined for the NBN company should be applied to all other FTTP providers.

Obligations to supply retail services

Using FTTP deployments in new greenfield estates, retail providers will be able to supply a range of retail services to end users, including voice, broadband and content services.

With the entry of new infrastructure and service providers in greenfields, the issue arises as to whether existing universal service arrangements which safeguard the delivery of telephony services should be revised for these areas.

In the absence of changes to the existing USO, Telstra would remain obliged to ensure reasonable availability of a standard telephone service on request in new greenfield estates, even where an alternative provider has installed an FTTP network. Under this scenario, Telstra could seek access to the FTTP infrastructure to provide these services. Alternatively it would remain free to determine the technology (other than copperbased networks if these were precluded by new legislation) it uses to fulfil its USO. In the absence of any modification of the USO, it would be Telstra's commercial decision to offer other services (e.g. broadband internet) in the estate.

An alternative is that, in the event that a FTTP network is installed by another carrier and there are other retailers offering services on that network in a greenfield development, Telstra could be relieved of its obligations as the universal service provider and these obligations could be transferred to another party. In this scenario, any changes made to the USO requirements in these areas may need to be contemplated in the context of the broader regulatory review.

Retail pricing

The wholesale pricing arrangements that are put in place under the open access model proposed above would form the basis for the level of retail pricing. It is therefore important that effective wholesale arrangements are in place, including regulatory oversight, to ensure that consumers benefit at a retail level. It is envisaged that, where relevant, access prices would

be subject to ACCC oversight through the operation of the Part XIC regime. Moreover, as discussed above, pricing would be a factor that would generally be considered in the selection of a provider to rollout FTTP infrastructure in a greenfields estate.

If Telstra were a retail provider on the greenfields FTTP infrastructure, it would be subject to the price control arrangements that would apply to it generally. Currently, other retail providers would not be subject to direct price regulation. However, the proposed model envisages strong competition between retail providers to keep downward pressure on prices at this level. Whether greater regulation of prices in greenfield estates would be necessary or workable, would need to be considered in the broader regulatory context. Nevertheless views are welcome on this issue.

Questions

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?

ATUG: given the ubiquity of the FTTP NBN an alternate approach would be to require all retail providers to offer a USO voice service package, similar to the requirement on ABG providers to offer an entry level product. Where such services are uneconomic subsidy should be provided by Government as with the ABG. The NBN should be seen as an opportunity to remove Telstra only safety-net obligations progressively as the roll-out occurs.

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?

ATUG: the ABG model of an entry level product may be appropriate to ensuring affordability. Providers would of course be able to offer other service packages to meet the varied needs of customers but a simple, entry level offer to encourage take-up of the NBN may be needed. When the NBN becomes a Brownfields project it will important to have a “transfer offer” to ensure a “no disadvantage” shift to the NBN.

Other safeguards and requirements

As a general principle, other existing safeguards would continue to apply to carriers and carriage service providers in greenfield estates. For example, carriers would be subject to requirements in relation to interception and assistance to law enforcement agencies. Carriage service providers are

subject to requirements including the Customer Service Guarantee and requirements around the provision of emergency call services.

These safeguards may be modified in the future depending on the outcome of the regulatory review. If strong separation arrangements between wholesale and retail operations were required in greenfields, some regulatory changes may also be useful to ensure consumer and other safeguards touching on both levels of operation could still operate effectively.

Reporting

As part of these arrangements carriers or councils could report to the Australian Communications and Media Authority or another appropriate body on new developments, total premises and the numbers passed and connected by FTTP. Reporting should however, be kept to a minimum so as to minimise the burden on industry players.

Questions

34. How would progress in delivering FTTP in greenfield estates be best monitored and reported?

ATUG: Planning Departments at State level in conjunction with Local Governments are likely to have the best access to local data on new developments, total premises and premises passed. Premises connected data will more likely come from retail service providers as services are connected.

Enforcement

If the installation of FTTP by developers was required under telecommunications law (model 1), noncompliance would be subject to the sanctions under the Telecommunications Act.

If the installation of fibre in greenfields was required under planning law (model 2), developers would be subject to sanctions under existing local government planning laws.

Breaches of a prohibition on the rollout of nonFTTP fixed line networks would be subject to sanctions under the Telecommunications Act (model 2).

Other obligations falling on carriers and carriage service providers would be subject to sanctions under the Telecommunications Act or the Trade Practices Act.

Next steps

The Australian Government is meeting with stakeholders on the matters raised in this paper. Additionally, written feedback from all interested parties, including on matters which may affect the implementation of this initiative but which are not raised in this paper, is welcome by 5pm (AEST), 12 June 2009.

Following this consultation process, the Australian Government will finalise its approach and, as required, finalise the preparation of legislation.

Clearly the implementation of this policy includes a number of

supplementary activities. It may be useful for a stakeholder group to be established to discuss and coordinate these activities. Further information will be published on these activities following consideration of feedback on this paper.

Questions

35. What further steps should be undertaken to support this initiative?

ATUG:

- Community and Consumer information campaign – to mirror the Digital TV Switchover campaign
- Developer and Planner Forums including State and Local Governments
- Construction and Cabler Training and accreditation programs
- Standards development – infrastructure elements
- Carriers and carriage service providers – wholesale product specification, development, provisioning, fault and billing processes
- Federal, State and Local Government co-ordination through OCC

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?

ATUG: supports the establishment of an NBN Stakeholder Group. Its main function would be to act as a point of co-ordination between all the Government, Industry, Community and End Users groups interested in aspects of the NBN roll-out as listed above. The Stakeholder Group could also be an independent point of reference for information about progress with NBN issues and implementation. The NBN Stakeholder Group could also play a co-ordinating role in specific tasks such as ensuring standards, training packages and programs, planning guidelines, progress reporting and the like provide national consistency without limiting local initiatives and flexibility. NBN Stakeholder Group may be able to play an independent oversight role in the early implementation phases of Open Access and Equivalence Obligations ensuring that any problems are identified and correct systemically whether through planning guidelines, specifications and standards, training, accreditation, consumer information or other means.