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Manager
Fibre in Greenfields
Networks Policy and Regulation Division
Department of Broadband,
Communications and the Digital Economy
GPO Box 2154
Canberra
ACT 2601

Submitted via e-mail

**National Broadband Network: Fibre-to-the-premises in greenfield estates
Consultation paper**

Master Builders Queensland (Master Builders) welcomes the Australian Government's consultation paper on fibre to the premises (FTTP) in greenfield estates as part of the National Broadband Network (NBN) and the opportunity to provide a formal submission to the process.

We ask that the attached submission be accepted as our contribution to this important debate and look forward to engaging with the Department of Broadband, Communications and the Digital Economy as the peak representative body of the building and construction industry.

Please feel free to contact the undersigned on (07) 3225 6420 to discuss any aspect of this submission. Master Builders looks forward to participating further in this process.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'D Barlow', is written over a light blue rectangular background.

Darren Barlow
Director - Housing

Master Builders
Head Office
Master Builders House
417 Wickham Terrace
BRISBANE QLD 4000

Telephone: (07) 3404 6444
Facsimile: (07) 3832 2361
ask@masterbuilders.asn.au
www.masterbuilders.asn.au



MASTER BUILDERS QUEENSLAND

National Broadband Network: Fibre to the premises in greenfield estates

Submission to Department of Broadband, Communications and the Digital Economy

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INTRODUCTION

Master Builders is Queensland's premier building and construction representative organisation. Master Builders represent over 11,000 businesses within the Industry, including builders, subcontractors, supplier / manufacturers, certifiers, consultants and students.

Due to the depth and scope of Master Builders' members spanning the spectrum of the building and construction industry we are able to offer a unique perspective on all facets of the building industry and in particular issues which impact on housing affordability.

In this submission Master Builders comments on the consultation paper holistically and specifically on certain of the consultation paper questions.

This submission is dissected into two discrete parts, as follows:

Part One: General comments

In Part One of our submission we provide high level commentary on some of the key principles outlined in the consultation paper and their impact on the housing construction sector.

Part Two: Response to Consultation paper questions

In Part Two of our submission we provide our response to specific consultation paper questions.

Master Builders has expressed views and opinions in this submission on the consultation paper at a high level and these views are subject to change as details emerge on the update of the Strategic Plan. Furthermore, any areas in which we have not expressed a specific view at this stage may be likely followed by detailed opinion as the consultation progresses into planned implementation and we welcome the opportunity to continue to engage with the Department.

Master Builders supports open-access provision of affordable future-proof broadband services to all sections of the Australian community. However, we believe that the consultation paper lacks the rigour of a cost-benefit analysis, under estimating costs and overestimating benefits and risks being detrimental to housing affordability.

The mandating of fibre to the premises ("FTTP") and prohibition of new copper networks is more likely to be of benefit to the National Broadband Network ("NBN") Company than it is to residents of greenfield developments who would face a decrease in housing affordability based on the proposed model.

Mandating FTTP to greenfield developments prior to the roll-out of the NBN to those developments risks consumers paying for the incremental costs of "last-mile" fibre optic networks for up to eight years before the NBN and its assumed benefits are delivered. The Government should either delay mandatory FTTP roll-out in greenfield developments until

the completion of the NBN or ensure that consumers are not faced with incremental FTTP infrastructure costs until such time as their development is connected to the NBN. Under the latter proposal, either the NBN company or Telstra should be responsible for meeting incremental FTTP infrastructure costs until at least such time as the NBN is connected to the particular greenfield development.

Cost estimates for FTTP used in the consultation paper appear to be optimistic given recent US studies show that the dominant FTTP provider has costs of some \$5000 (US\$3000-4000) based on a 40% take up rate and as high as \$8700 for a 20% take up rate.

We believe that the evidence for increased property values is based on poor interpretation of old and out of date data and therefore question whether sufficient cost benefit analysis has been undertaken. If anything the evidence suggests that consumers place a lower value on FTTP than it costs to install thereby casting doubts on the conclusions of the Australian Government on the National Broadband Network proposal.

We also believe that the relevant comparison to make on the cost of FTTP is not to the cost relative to other infrastructure or to the total house and land cost but to the cost of what FTTP replaces. The Government's own estimates suggest that FTTP represents a 67% increase on copper network costs and on an FTTP cost of \$8700 the increase is 480%.

There is as yet little preparation for mandating FTTP with no rules or guidelines in place and few companies able to design, install and connect at the "sub-wholesale" level required under this proposal. The proposed timeframe for implementation of 1 July 2010 is therefore very ambitious to achieve and we recommend delay until at least 1 July 2011 if the Government believes in mandating FTTP.

Master Builders thanks the Department for the opportunity to contribute to the debate on this important issue. Master Builders would be pleased to make our policy analysts available to discuss this submission and our views in more detail.

PART ONE: GENERAL COMMENTS

MANDATING FTTP IN GREENFIELD DEVELOPMENTS

While there is an economic rationale that supports the view that it does not make sense to roll out the National Broadband Network and a copper network at the same time, it does not follow that this lack of economic logic necessitates the mandatory roll out of fibre trunk networks, nor of the mandatory roll out of fibre to the premises nor of the banning of copper networks in Greenfield developments.

The mandating of such roll outs and the banning of copper networks clearly makes the NBN more economically justifiable, but this is a network that the Government proposes to sell to the private sector within five years.

The mandating of FTTP roll out in greenfield estates forces buyers of greenfield properties to become 'early adopters', willingly or not, and to subsidise the cost of rollout of the NBN, whether or not they use the network for anything more than traditional telephony. Without a similar requirement on all homes that are passed by fibre to be retrofitted and connected to the NBN it appears that buyers in greenfield developments effectively pay twice; once as taxpayers providing the \$42 Billion funding (or meeting interest payments through general taxation) for the NBN infrastructure and secondly as mandated consumers on the fibre network.

In the previous significant investment by the Australian Government in nation building, namely the Snowy Hydro Scheme, there were no mandatory requirements for the purchase of renewable power (until many years later through MRET) and no banning of alternative means of providing electric power.

More broadly, mandating the use (or non-use) of products has traditionally related to social welfare benefits aligned to issues of safety (e.g. seatbelts), health (e.g. pharmaceuticals) or the environment (e.g. MRET scheme). It is unusual for Governments to mandate the use (as is proposed for FTTP) or non-use (as is proposed for copper wire) of products for other reasons, such as maximising the economies of scale of infrastructure rollout or to solidify the value and customer demand for a piece of competitive wholesale infrastructure (that, it is presumed, will be subsequently privatised).

Furthermore, it is even more unusual to effectively make a very small proportion of the population, namely buyers of properties in greenfield developments, subject to mandatory rules and prohibitions which do not extend to the rest of the population.

COMMENCEMENT DATE

The consultation paper recommends a commencement date for the mandatory roll-out of FTTP of 1 July 2010 but also notes that *“final decisions on the operating arrangements, detailed network design and private sector arrangements for the company established to roll-out and operate the NBN [will follow the] consideration of an Implementation Study to be completed in early 2010.”*

Master Builders believes that there is insufficient time between the expected completion of the Implementation Study and the proposed mandatory roll out of FTTP. At best there will be six months to establish all appropriate guidelines, training and changes to any building or planning practices.

Worse, the fact that the Implementation Study will be complete early 2010 suggests that the roll out of the NBN itself cannot commence before that date. The proposed mandating of FTTP from 1 July 2010 in greenfield developments therefore suggests that the NBN will not be in place for connection to the “final mile” at that time.

We presume that in absence of the deployment of the NBN to the area in which the greenfield development occurs that the FTTP will be connected to Telstra’s existing infrastructure before the “last mile” and that it is technologically feasible. This would appear to defeat the purpose of mandating FTTP if additional costs are incurred for “future proof” final mile infrastructure that connects to upstream networks. In existing areas of known “broadband blackspots”, buyers on greenfield developments would end up paying for “future proof” fibre optic cabling that connects to the existing network which appears incapable of providing current best technology broadband.

We note that the proposed roll out of the NBN is expected to take eight years, presumably commencing some time in 2010. The proposed mandating of FTTP in all greenfield developments from 1 July 2010 will mean that buyers of properties in greenfield development could wait for as long as eight years for connection to a fibre optic NBN. While the consultation paper comments that *“it does not make sense to roll-out the NBN while allowing new premises in greenfield estates to be connected with old technology”* we would argue that it does not make sense to roll-out FTTP while allowing new premises in greenfield estates to be connected to old technology”.

The proposal for mandated FTTP in greenfield developments would therefore appear to disadvantage buyers in such developments relative to existing housing stock. Presumably as the NBN is rolled out past existing housing stock, consumers will choose (or be mandated) to connect at the time of NBN rollout. That is, any costs to the consumer associated with the final mile are at least associated with connection to the fibre-optic NBN and hopefully to available retail services. This is not a luxury that can be assured for buyers in greenfield developments from 1 July 2010.

While the Government proposes mandated FTTP from 1 July 2010, while awaiting the NBN network and the service delivered by it to be rolled out over eight years, we note that this is the opposite of the roll-out of digital television services where the digital signal is available in most areas already but the cut-off of analogue services occurs between 2010 and 2013. Nor, in the case of digital television, has the Government forced all new televisions to be digital, nor has it banned the sale of analogue televisions. For broadband services, the Government appears to be mandating owners of properties in greenfield developments to buy the “future-proof” cart before they have the horse.

Master Builders does not support the mandated roll-out of FTTP to greenfield developments under the scheme as proposed for reasons explored further below. If the Government chooses to continue with the proposal to mandate FTTP in greenfield developments then Master Builders suggest one of the following models be followed to ensure an equitable outcome:

Model A. the commencement date for mandated FTTP in a particular greenfield development be consistent with the local completion of the NBN network; or

Model B. mandatory roll-out of FTTP in greenfield developments prior to the availability of the NBN for FTTP to connect to must be undertaken with transitional arrangements that ensure that FTTP connected customers do not pay for the incremental costs of FTTP (relative to copper wire) until at least such time as the FTTP is connected to the NBN.

In the case of Model B above, Master Builders recommends that transitional arrangements are likely to be required between the NBN company and Telstra, with Telstra continuing to retain universal service obligations for voice services to the FTTP premise connected to its copper network.

IMPACT ON HOUSING COST

The consultation paper notes that estimated cost per premise is of the order \$2500, being some \$1500 more expensive than traditional copper wire and goes on to note that the cost is less than 1% of \$350,000 house and land package and comparable to or lower than the cost of other utilities.

In our view the relative cost between other infrastructure such as water, stormwater, power and sewerage and broadband infrastructure is essentially irrelevant given that those are services which are largely related to utilities and not to discretionary services. We note that the intention of the comparison may be intended to reflect on other services that are potentially natural monopolies due to the large cost of replicating infrastructure. However, in the case of the provision of broadband services, consumers already have a wide range of alternative services that deliver broadband whether through satellite, cable, ADSL or wireless services that are priced based on their relative utility in capacity and speed.

THE US EXPERIENCE

While the consultation paper notes an estimated cost per premise of \$2500 it is not clear on what evidence this is based. We note that a widely referenced research paper in the US published in November 2008¹ refers to the average cost per customer for Verizon, one of the largest deployers of FTTP with 3.3 million connected homes², to be US\$3000-4000, or some AU\$3700-5000 based on Reserve Bank of Australia exchange rates of 5 June 2009 (AU\$1 =US\$0.8041). These observed costs are as much as twice that assumed in the consultation paper (and with greater economies of scale reducing those averages over what could be expected in Australia).

Verizon's average cost per customer of up to \$5000 is based on a 40% take up rate with a cost closer to \$8700 (US\$7000) at a 20% take up rate or almost 3.5 times the estimate used in the consultation paper. Reports to the US FTTH Council² state that at 30 March 2009 approximately 15.2 million homes are passed by fibre optic in North America with 4.4 million homes connected (a take up rate of 29%). The report also notes that aside from Verizon there are another 681 providers of FTTH representing some 1.1 million connections.

Based on the evidence it appears that the US market has economies of scale and significant competition in provision of FTTP yet costs for the largest provider with some 75% of the market are reported to be at least \$5000 per connection. Given that Australia is up to ten years behind the US in terms of deployment and has much lower penetration, competition and number of service providers we would anticipate that the cost per premise in the Australian context to be at least \$5000 and more likely significantly above Verizon's costs of \$8700 on a 20% take up rate.

We note that the take up rate for FTTP in the US at March 2009 is reported as 31.3% having fallen from a peak in 2004 and is now no higher than six years ago in 2003. There seems little reason to suggest that take up rates in Australia will be any higher, nor climb any faster, nor costs come down any lower. This creates significant uncertainty for the benefit of forcing FTTP onto homes in greenfield developments.

¹ "Homes with tails: What if you could own your internet connection?" Derek Slater and Tim Wu, November 2008 http://www.newamerica.net/files/HomesWithTails_wu_slater.pdf

² "Fiber to the home: North American market update for the FTTH Council" RVA LLC, April 2009, p9 http://www.ftthcouncil.org/sites/default/files/RVA.FTTH_Apr09.060109.pdf

COSTS RELATIVE TO HOUSE AND LAND PACKAGE

While the consultation paper uses a \$2500 cost to suggest that FTTP costs are less than 1% of a typical house and land package of \$350,000, at \$5000 this would be 1.4% or at \$8700 this would be 2.5%. Further, this fact alone should not be and is not sufficient to mandate the rollout of FTTP. The more relevant comparison is not the relative cost compared to the total cost of house and land but rather the relative cost compared to alternative service provision, namely traditional copper wire. On the consultation paper's own estimates the provision of FTTP comes at a 67% premium compared to copper wire, or 230% for a \$5000 cost, or 480% for an \$8700 cost.

The Government is proposing mandating FTTP for greenfield development from 1 July 2010, some six months after the proposed ending of the First Home Owner Boost scheme. That scheme currently provides an additional incentive for first home buyers of Greenfield homes of \$14,000, reducing to \$7000 between 1 October 2009 and 31 December 2009. First home buyers of greenfield properties from July 2010 will therefore face increased costs of \$15,000 on the consultation paper's cost estimate or as much \$21,700 (assuming an \$8700 FTTP cost) at that time as a result of the loss of the First Home Owners Boost and the mandating of FTTP. This reflects an equivalent combined cost impost of 4.3-6.2% due to changes in government policy.

PAYMENT FOR FTTP INFRASTRUCTURE

The consultation paper assumes that payment for FTTP installation would be like that for utilities, namely paid by the developer and passed on to the buyer in the cost of a home at time of purchase. Aside from the fact that this could be a significant burden given the uncertainty in what that cost will actually be in Australia, this is not consistent with the current model for providing voice and data services infrastructure in greenfield development sites.

In the fixed line copper network Telstra charges users of its lines a monthly rental fee, thus recovering the cost of the fixed network over the economic lifetime of the asset (i.e. all design, installation and capital costs are borne by Telstra and are not paid up front by consumers in stark contrast to this proposal). Given that FTTP costs could be a multiple of copper network costs it seems appropriate that the same funding model should apply to FTTP if the government wishes to promote competition and achieve take up rates at or above the US experience. Doing so will also resolve some of the problems that would otherwise arise with housing affordability in greenfield developments if the government does mandate FTTP without understanding the real cost base.

IMPACT ON PROPERTY VALUE

Much of the literature on FTTP notes that there is evidence of an increase in property values usually based on US studies that report an increase of value of some US\$4000-5000. It appears that these reports point to a single study conducted by the market research firm RVA LLC in the publication "*FTTH Advanced Broadband Report*"³ but given that this report is not publicly available we have not been able to verify the original source (the cost of this report appears to be US\$1850). The study is cited in various places including in the US Fibre to the Home Council publication "*Fiber to the Home*"⁴ from which the chart in Figure 1 below is reproduced.

We note that the US\$5000 figure widely quoted is based on the value that developers attribute to houses with FTTP/FTTH; whereas the estimate based on consumers who do not yet have FTTP is half that at US\$2485. Given that property values are ultimately determined by the buyer, we believe that the cited study would be better referenced as suggesting property prices increase by some US\$2500 and not the widely quoted US\$5000. We also note that at US\$2500, the increase in property value is actually below the reported cost of FTTP of US\$3000-4000 per connection and thus FTTP actually reduces the overall capital value of a property rather than increase it is claimed.

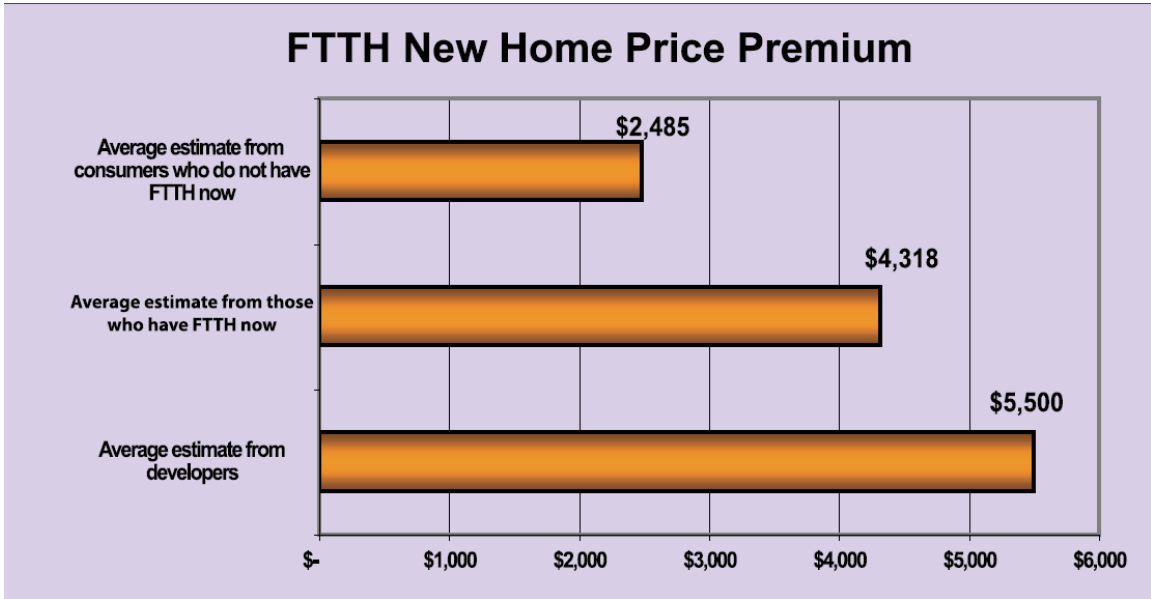
"*Fiber to the Home*" goes on to state "Before the boom ended, Michael Render of RVA LLC estimated, on the basis of surveying home buyers and developers, that FTTH adds about \$5,000 to the price of a home. The size of the increase is less certain now, but it is clear that FTTH homes sell faster." According to Integrated Asset Services' IAS360 US House Price Index⁵, national house prices have fallen 16.4% since the 2006 peak. We are not aware of any evidence to suggest that FTTP home values have fallen by any lesser amount and note that the issue of homes selling faster, if true, is more likely due to a range of correlated factors including location, property prices in the location and wealth distribution rather than the presence of FTTP.

³ FTTH Advanced Broadband Report http://www.rvallc.com/ftth_subpage2.aspx

⁴ Fiber to the Home 3rd Edition Spring 2009
<http://www.ftthcouncil.org/sites/default/files/FTTH%20Fiber%20Primer%20low%20res.pdf>

⁵ http://www.iasreo.com/ias360_update.html

Figure 1 FTTH new Home Price Premium



It would appear that the increase in property value associated with FTTP may be consistent with the costs of the installation and does not in fact lead to any additional or incremental property value. At best, consumers who do not yet have FTTP attribute a value of US\$2485 to FTTP which is less than its cost of installation of US\$3000-5000.

Lastly, any value attributed to FTTP assumes that the FTTP is actually connected to trunk fibre optic infrastructure. In the Government’s proposal of mandated FTTP in greenfield developments from 1 July 2010 it will take up to eight years for all such developments to be connected to the NBN.

GUNGAHLIN COMMUNITY COUNCIL SURVEY

The consultation paper goes on to comment on a study by the Gungahlin Community Council in 2006 that asked respondents “how they would react if a developer who had planned FTTP advised prospective buyers that he had decided not to proceed” noting that 60% stated that no offer would be satisfactory and that of the remaining 80% they would not proceed without compensation of at least \$5000.

The survey received 186 responses to this question with 60.2% agreeing with “I would not accept any offer – I would buy elsewhere” and 44 responses requiring a price reduction of \$5000 or \$10000. The small sample size is not statistically significant when applied to the general population. Furthermore, we understand Gungahlin to be in a “broadband hotspot” that results in low ADSL availability and the survey may reflect a higher value placed on FTTP than would be the case from the general population with greater access to broadband services.

The US experience based on connections to 4.4 million homes show that take up rates are almost 32% where the average cost to premises is US\$3000-5000 and this may be more representative of what may happen in Australia than a small sample survey.

IMPACT ON AFFORDABILITY

Greenfield developments are often in suburbs that are more remote from Central Business Districts and can result in increased travel costs. Greenfield developments are also often attractive to buyers seeking more affordable housing including first home buyers. Anything that causes an increase in the cost of housing necessarily results in a decrease in affordability.

The actual costs of providing mandated FTTP in an Australian context is not clear and evidence from the US market suggests that it could be significantly higher than that assumed in the consultation paper. The largest impact on housing affordability, aside from the total FTTP cost, is the manner in which the consumer meets those costs.

Under the Government's proposal, consumers buying property in greenfield developments from 1 July 2010 would pay for FTTP infrastructure while waiting up to eight years to be connected to the NBN.

Master Builders believes that all consumers should have non-discriminatory access to future proof broadband services. Whatever the scale of the costs of providing FTTP infrastructure, the best method of ensuring FTTP is affordable to the majority of the population is to deliver the FTTP and recover the infrastructure costs associated with this provision in the same way that Telstra currently recovers its fixed costs for voice and data services, namely through monthly line rental charges to consumers.

If the Government chooses to mandate FTTP in greenfield developments before the delivery of the NBN to that development, consumers should only pay for infrastructure charges, line rentals and data services as if they had a copper connection. Under Master Builders Model B, the FTTP infrastructure may be provided by the NBN company in greenfield developments where the NBN has not been rolled-out with all capital costs absorbed by that company under a Universal Service Obligation.

PART TWO: RESPONSES TO CONSULTATION PAPER QUESTIONS

In Part Two of our submission, Master Builders responds directly to many of the questions in the consultation paper. Our responses are largely based on the assumption that the Government will either delay mandating FTTP in particular greenfield developments until such time as the NBN is locally available (Master Builders' Model A) or makes transitional arrangements to avoid disadvantage to buyers in greenfield developments where the NBN is not available (Master Builders' Model B).

DELIVERING FTTP TECHNOLOGY IN GREENFIELD DEVELOPMENTS

The Consultation paper suggests two potential models for the installation of FTTP infrastructure namely:

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

Model 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.

CONSULTATION PAPER QUESTION 1

What are the relative merits of the models outlined? Which is the preferable approach? Why?

MASTER BUILDERS' RESPONSE

Subject to accepting Master Builders' Model A or Model B, Master Builders believe that Model 2 is most in line with current development activity where the role of local government is to implement rules and codes within a state and national framework.

Due to the possibility of variations and lack of consistency across local authority jurisdictions which could add to bureaucracy and the cost of compliance, Master Builders strongly support a role for the Australian Government in developing model laws, templates, specifications, codes and guidelines for implementation by state and local government and restricting the ability of local government to amend or change any of these requirements. It will be further necessary to ensure these rules do not lead to further delay Development Approvals and hence costs of development.

CONSULTATION PAPER QUESTION 2

Is any action required by the Australian Government to facilitate local councils and planning authorities requiring the installation of FTTP facilities?

MASTER BUILDERS' RESPONSE

The Australian Government can facilitate the requirement for FTTP installation at a local level by implementing the suggestions raised in Question 3.

CONSULTATION PAPER QUESTION 3

Would the preparation of model laws, templates and/or national specifications or guidelines assist local councils and planning authorities with implementation?

MASTER BUILDERS' RESPONSE

Preparation of model laws, templates, guidelines and specifications should greatly assist local authorities in implementation by reducing the time spent on replication and reinvention at the local level. In addition, greater certainty will be provided to the fibre optic and construction industries with the resultant reduction in variation across local authorities.

CONSULTATION PAPER QUESTION 4

Would the development of educational tools for industry assist? If so, what?

MASTER BUILDERS' RESPONSE

While appropriate consultation and briefing should be provided to industry, the provision of industry training and education is traditionally provided by private sector organisations including associations such as Master Builders Queensland. We believe that the Australian Government should prepare a private tender for any educational tools and educational focus required such that training organisations can meet the needs of the industry and tender the delivery of these services within specified areas such as Queensland etc

CONSULTATION PAPER QUESTION 5

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

MASTER BUILDERS' RESPONSE

There are few if any additional safety issues surrounding fibre to the premises and thus there is no requirement for certification for safety purposes. There is likely to be competition between infrastructure providers which will assist in maintaining minimum standards and meeting national specifications, reducing any need for performance standard certification. Furthermore, developers and consumers can contract to meet performance criteria and will therefore be protected through contractual arrangements. In the event that the Australian Government continues to believe in the need for certification, that need would be best met through self-certification (by the installer of the FTTP infrastructure) to reduce any risks of unnecessary delay or cost in the certification process.

CONSULTATION PAPER QUESTION 6

To what extent is a nationally co-ordinated approach preferable to one where state and territory or local governments take the lead?

MASTER BUILDERS' RESPONSE

Given that the National Broadband Network as a wholesale carrier will be a new national monopoly it is appropriate that there is a nationally coordinated approach to roll out and implementation. This will assist in ensuring consistency across state and local authority jurisdictions which provides additional certainty to industry and the potential for greater competition in the roll out of FTTP from the NBN nodes to consumers. Given the pace at which the Australian Government is seeking to rollout the NBN and the short timeframe from completion to proposed sell-down of the Government's remaining stake, it is appropriate that coordination is led nationally to minimise risk of delay.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Obligations on developers should be limited to the provision of appropriate pit and pipe infrastructure with sufficient capacity for the installation of multiple services. Some 60% of the cost of provision of FTTP is based on the provision of or replication of such infrastructure and developers are best placed to have the obligation of providing sufficient capacity.

Builders would be expected to be responsible for the provision of (or subcontracting of) internal cabling and the external cabinetry to contain hardware including either back up battery or uninterruptible power supply ("UPS"). No specific obligations would appear to be necessary other than a general obligation to meet any relevant changes to building codes or guidelines.

CONSULTATION PAPER QUESTION 8

Is there scope for the provision of lead-ins in greenfields to be made contestable?

MASTER BUILDERS' RESPONSE

Master Builders believes there should be scope for contestability at all stages up to the node, namely competition in the provision of retail services, internal cabling installation and provision, connection and pit and pipe infrastructure installation and provision. This is best achieved through competition and placing requirements on the developer to facilitate competition through pit and pipe infrastructure.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Costs to the consumer and premise owner are largely made up of consumption of FTTP services and the cost of infrastructure. The model for provision and subsequent payment for these services can make a substantial difference to affordability dependent on whether there is an upfront obligation to pay for infrastructure or monthly rental as in the current provision of telecommunications infrastructure by Telstra.

Aside from the payment model, the other relevant factors influencing cost, and thus affordability, are related to the number of dwellings passed, the density of dwellings and the number of connections, or take-rate. In addition, the distance from other larger FTTP users such as businesses, education facilities or hospitals will make a substantial difference to the economics of FTTP deployment in residential developments.

Various studies and estimates have been made about the take-rate, cost to serve and profitability of FTTP provision but each is highly dependent on the number of services taken, distance from the node, whether infrastructure is retrofitted, whether infrastructure is aerial or undergrounded and the density of the development and of the surrounding area.

Clearly, mandating FTTP (and prohibiting copper) for a single dwelling development in a rural setting would come at a significantly higher per-dwelling cost than for a large deployment to multi-dwelling buildings in an urban setting.

Master Builders believes that the appropriate number of lots required for a development to qualify as greenfield and requiring FTTP can only properly be determined by robust economic modelling rather than the arbitrary setting of a minimum size. Such economic modelling should ensure both that the provision of FTTP can be made on a profitable basis and that housing affordability is not adversely affected; otherwise Government would be better not mandating FTTP roll out (and prohibition of copper networks) and leaving it to the market to decide.

In current developments, economies of scale typically only commence above 200 lots per development based partly on purchasing economies but also on the cost of trunk infrastructure including road, water and sewerage and stormwater. Many developments may not be profitable up to 500 lots and if the Government is to choose an arbitrary figure we would recommend that FTTP requirements exist only in greenfield developments of greater than 500 lots.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Large developments with long release times will inevitably result in provision of the NBN infrastructure ahead of the time that is needed by the development as a whole. For individual parts of the development, especially where provided by different developers, contracting for the provision of last mile infrastructure and provision of the FTTP would be undertaken on a similar basis to smaller scale developments.

Furthermore, with sufficient specifications and consistent local authority guidelines there should be no reason to expect any lack of consistency across the development, especially where it incorporates more than one local authority.

Given that each stage of a development, especially across a number of developers, will require Development Application ("DA") approval at each stage, linking FTTP roll out across each stage of DA approval (separately) would be required to ensure consistency.

CONSULTATION PAPER QUESTION 11

Are there any special requirements for multi-dwelling units or office blocks?

MASTER BUILDERS' RESPONSE

Master Builders understands that there are technical issues related to the type of infrastructure provided in shared or multiple user environments but leaves this to experts in the area to comment on. We further assume that ownership and payment for shared infrastructure and maintenance thereof would be consistent with that applied under the Body Corporate arrangements currently operating.

In the case of embedded networks we believe that Government should ensure that competition for retail services is available to all units with a multi-dwelling on an individual basis. Rules within the electricity industry with embedded networks, for example, have caused unit owners and shops within shopping centres to be unable to access competition as a result of being required to buy from the reseller, or owner of the embedded network. This should be specifically avoided in the roll out of FTTP.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

We refer to our response to Question 9 and add that the economics for multi-dwelling units will be lower on a per dwelling basis than for individual dwelling developments. Additionally, multi-dwelling units are more likely to be in areas of higher urban density. However, the availability of the NBN network and the potential for increased FTTP deployment costs into a greenfield development within an existing urban environment may result in an increase in costs through partial retrofitting into existing pit and pipe infrastructure.

In the event that an arbitrary number is chosen we would recommend that FTTP not be required for multi-dwelling residential buildings under ten storeys.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Aside from issues raised throughout our response in relation to the timing of delivery of the NBN to greenfield developments with previously mandated FTTP, the only relevant issues are the cost in relation to backhaul which we assume will be largely related to distance and the coordination between the NBN company and developers and between the NBN company and the FTTP companies.

CONSULTATION PAPER QUESTION 15

What exemption arrangements, if any, would be appropriate and how should they be administered?

MASTER BUILDERS' RESPONSE

State Government and/or local authorities should be able to exempt greenfield developments from mandated FTTP (and prohibited copper networks) where the NBN has not been deployed within a sufficient distance to make FTTP economic and affordable. We refer to our response to Question 9 on the economic modelling that should occur to inform that assessment.

Master Builders also recommend that State Government and local authorities be provided the flexibility to relax any rules but not to have the flexibility to implement guidelines which are above any minimum standards determined by the Australian Government.

CONSULTATION PAPER QUESTION 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)?

MASTER BUILDERS' RESPONSE

We refer to our comments in Part One on the issue of mandating FTTP and to our response to Question 9 on how to determine inclusion or exclusion of developments if the Government does implement mandatory requirements.

The main variable which are likely to be important in determining exemption would include distance between the NBN and the development, the timing of rollout of the NBN to avoid greenfield buyers paying for infrastructure that they cannot use and the density of the development to be sufficient to cause FTTP providers to want to compete profitably.

COMMENCEMENT DATE

CONSULTATION PAPER QUESTION 17

Are there any factors that the Australian Government should be aware of in relation to the commencement of FTTP requirements?

MASTER BUILDERS' RESPONSE

We refer to our earlier responses and assume that the Government will either delay mandating FTTP in greenfield developments until the NBN is complete (Master Builders' Model A) or makes transitional arrangements to avoid disadvantage to buyers in greenfield developments where the NBN is not available (Master Builders' Model B).

In addition, we believe that the proposed commencement of 1 July 2010 for mandatory FTTP in greenfield developments remains ambitious given the stage the Government is at in the consultation process and the requirements for drafting and implementing legislation and regulation at Federal, State and local authority level.

We further believe that a timeframe of twelve months may risk the establishment of sufficient competition, making early deployment at high cost, and not be sufficient time for developers and builders to undertake sufficient training or develop and implement marketing.

There are additional important issues including the availability of trained and qualified labour at a reasonable cost across all areas of the country where the NBN is expected to be rolled out. It is difficult to imagine that this will be available by 1 July 2010.

As yet there are no design guidelines, except in ad-hoc cases, and it is not clear who will be responsible for design, who will pay for it and what form if any of certification there will be. In the worst case, developers may be responsible for submitting design for approval and

local authorities, without the experience, will be responsible for approval. To minimise their risk local authorities would inevitably engage their own external consultants that will add to cost and delay, increasing the DA process and resulting in reduced property development and construction industry employment.

Sufficient time is required to manage the process such that at commencement of any mandatory requirements the appropriate authorities and industries can be relied on to deliver, timely, cost effective and competitive services.

A delay to 1 July 2011 would provide an additional twelve months to resolve the above issues and is recommended by Master Builders. It may be necessary to further delay based upon how difficult it is to resolve these significant and numerous potential issues.

CONSULTATION PAPER QUESTION 18

Under what circumstances, if any, should transitional arrangements allow for the installation of copper-based infrastructure?

MASTER BUILDERS' RESPONSE

With sufficient lead time to implementation by moving the commencement date to 1 July 2011 there should be no requirement for transitional arrangements. Retaining the proposed implementation date of 1 July 2010 means that there are development projects already in progress which had not contemplated the increased cost that will arise from mandated FTTP. It is unreasonable to change the economics of such projects by incurring rework and increased costs that were not previously contemplated within budget. If the Government does not move the implementation date, we recommend as a minimum that all developments that have lodged development approval should not be subject to the proposed mandatory requirements.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

We refer to our response to Question 18 above.

Competition and regulatory framework

CONSULTATION PAPER QUESTION 20

Is the Australian Government's intention that the NBN company not overbuild existing FTTP developments in greenfield estates appropriate?

MASTER BUILDERS' RESPONSE

Where current FTTP provision exists in advance of the build of the NBN it would seem inappropriate on economic grounds alone that the NBN should replicate that infrastructure.

CONSULTATION PAPER QUESTION 21

Are there any specific issues that should be considered in relation to the role of the NBN company in greenfield estates?

MASTER BUILDERS' RESPONSE

To encourage competition from the private sector and to avoid legacy issues that have plagued competition in the fixed line telecommunications sector it would seem appropriate to prevent the NBN company from competing for provision of the final mile of FTTP provision.

However, under the model proposed by Master Builders where consumers in greenfield developments are not disadvantaged by paying for mandated FTTP infrastructure where the NBN has not been rolled out there will need to be transitional arrangements.

In the circumstances where FTTP has been mandated in greenfield developments but the NBN has not been rolled out, we propose that consumers pay for infrastructure and any ongoing costs as if their home was connected by copper wire at least until such time as the NBN is actually connected. This will give rise to costs that will need to be recovered by the FTTP provider and by the developer. It would be unreasonable to assume that the home owner, FTTP provider or developer carry these costs until such time as the NBN is connected to the particular development.

If the Government has mandated FTTP connection in a greenfield development in advance of the NBN roll out to that development it is appropriate that the NBN company carry the incremental cost of FTTP provision (against copper networks). Such transitional arrangements will be necessarily complex given that there are multiple interested parties.

To simplify such arrangements, if the Government mandates FTTP in greenfield developments, the NBN company could be required to have a USO to provide FTTP, connected to Telstra's copper network. Alternatively, Telstra could be required to have a USO to provide FTTP connected to Telstra's copper network. In either case, the NBN company or Telstra would be required to pay for FTTP until such time as the NBN is delivered to the local development whereupon the final mile for that development could be divested.

Additionally, obligations should be provided on the NBN company in relation to connections to the node to make it clear where property rights boundaries exist and the obligations on the NBN company to connect and pay for the connection at the node at a reasonable, transparent and regulated price.

CONSULTATION PAPER QUESTION 22

What measures could the Australian Government introduce to facilitate competition for the provision of FTTP infrastructure in greenfield developments?

MASTER BUILDERS' RESPONSE

Requirements on developers to provide capacity within pit and pipe networks in greenfield developments for the laying of fibre optic cabling would seem to be the best way to encourage competition given that such infrastructure can form some 60% of the cost of FTTP provision when retrofitting is required.

Regulating to minimise the discretion of local authorities in design, approvals and certification processes will also aid competition by removing unnecessary cost and time burden from overlapping regulations from bodies unable or inexperienced to perform such duties.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Publicly available development databases will provide information to the public and potential greenfield home buyers on where the NBN and FTTP may be available and will also aid the coordination of the NBN companies, developers and FTTP providers. Such information should be published at the lodgement of development applications or earlier where possible by the relevant local authority and amalgamated into a central Commonwealth database for public access.

CONSULTATION PAPER QUESTION 26

Should an alternative approach to providing access such as mandatory access to FTTP networks in greenfield estates be adopted? If so, what? Why?

MASTER BUILDERS' RESPONSE

We believe that mandatory open access is required to promote competition, but mandating access generally, without obligations to provide infrastructure, is unlikely to deliver FTTP on its own. The Government should seek as much as possible to promote competition without placing unnecessary obligations on industry or consumers.

CONSULTATION PAPER QUESTION 27

Should it be mandatory that new FTTP networks in greenfield estates after 1 July 2010 be wholesale-only networks? If introduced, should there be exceptions to this type of rule and if so how should they be administered?

MASTER BUILDERS' RESPONSE

Separation of retail and wholesale services is more likely to promote retail competition for the benefit of the consumer. Allowing FTTP network providers to be retailers may provide unfair advantages and risk the exclusion of other retailers. We would therefore prefer no exception to the separation of retail and wholesale services.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Given the relatively small number of FTTP deployments to date, relative to the proposed scale following roll out of the NBN, it would seem to be largely unworkable to operate different rules for legacy networks. It would also be unreasonable for consumers who have become first adopters to not have the same access to competition that will be afforded to other consumers. There may therefore be some requirement for transitional arrangements or compensation for existing FTTP networks subject to any proposed new rules.

OBLIGATIONS TO SUPPLY RETAIL SERVICES

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Under Master Builders' Model B, where greenfield developments are mandated prior to the local roll-out of the NBN, the NBN company could be the USP in place of Telstra during transitional arrangements. The minimum use expected of FTTP by any consumer can be expected to be for voice services if the Government has prohibited copper networks and it is appropriate therefore that Telstra continue to be the universal service provider so long as this service is appropriately regulated and compensated.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Under Master Builders' Model B where transitional arrangements are required, then either Telstra or the NBN company (depending on which was obliged to meet a USO) could determine the technology used so long as it is consistent with nationally determined FTTP guidelines and open access is provided.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Assuming there are no exceptions to the separation of retail and wholesale services and that open access is therefore provided on a competitive basis, the market should be expected to deliver a competitive retail price. Price regulation should only apply to monopoly service provision or markets where competition is shown as not having developed in a robust fashion.

We note that Master Builders' proposal to protect consumers from incremental FTTP costs in greenfield developments that have mandated FTTP provision prior to the NBN being rolled out locally will require regulation consistent with that currently in place for Telstra's fixed line copper network.

REPORTING

CONSULTATION PAPER QUESTION 34

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

MASTER BUILDERS' RESPONSE

Monitoring and reporting needs to be fit for purpose and should not result in an unnecessary, duplicative, costly burden or increase in bureaucracy placed on developers and builders. Changes to monitoring and reporting risk being used as a form of control, including the intentional addition of delay, by local authorities and should be avoided. If local authorities are to be utilised for monitoring and reporting purposes they should act only as a conduit of information within a national framework.

NEXT STEPS

CONSULTATION PAPER QUESTION 35

What further steps should be undertaken to support this initiative?

MASTER BUILDERS' RESPONSE

We support the continuation of industry consultation and refer to our response to Question 36.

CONSULTATION PAPER QUESTION 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?

MASTER BUILDERS' RESPONSE

Stakeholder groups with representation from the housing and construction industry, communications industries, consumers and planning authorities would assist in representing views throughout the implementation process. Master Builders Queensland would welcome inclusion on such groups as the peak body representing the building and construction industry.