

# Submission to the NBN Panel Regulatory Issues Framing Paper

17 March 2014

PUBLIC VERSION

## Executive Summary

Telstra supports the core principles of the National Broadband Network (**NBN**) policy, including a wholesale-only NBN and the progressive structural separation of Telstra.

### *A customer-focused implementation of the NBN*

Nonetheless, we believe the implementation of the NBN needs to be refined in order to improve the customer experience of migrating to the new network. Industry, regulators and policy makers need to focus on how to build more efficient end-to-end migration processes, to develop a wider range of NBN products to allow a smoother transition from legacy networks to the NBN, to improve service quality and functionality on the NBN and to achieve more transparency about the NBN rollout.

Telstra believes the experience to date has shown that the unique nature, scale and complexity of NBN implementation cannot be effectively managed within the traditional regulatory framework, which has proven to be slow and inflexible, unsuited to dealing with technical and operational issues, and excludes stakeholders who need to participate in implementation (ranging from carriers and RSPs to alarm companies and medical alert service providers).

Better end-user outcomes could be achieved by an industry-led process of rule-making for NBN implementation, within a framework of Ministerial Migration Principles which would apply to all industry players. In this framework, industry-based rules would be lodged with and enforced by the Australian Competition and Consumer Commission (**ACCC**) to ensure competition and consumer issues are addressed. NBN Co also would not be a de facto standards setter, but would refer to the industry process technical standards on its network which impact across access seekers. This model is likely to deliver a more collaborative, 'problem solving' approach to managing the complexity of NBN implementation.

Where appropriate, access regulation would apply to Telstra on its copper network (and other parties' networks) up to commencement of migration in a rollout area, migration would be managed through this new industry-based process, with access regulation then mandated through regulation of NBN Co's wholesale services once migration is completed.

### *A level playing field*

Facilities based competition for broadband services can occur under current fibre-to-the-premise (**FTTP**) policy in greenfield estates, some metropolitan apartment buildings, and elsewhere as defined by legislation. The extent to which facilities-based competition to the NBN is permitted is a policy decision for Government. Telstra's position is that if facilities-based competition is permitted, there must be a level playing field between all alternative builders, whether under regulatory restrictions like the superfast broadband rules or under contractual commitments to NBN Co.

### *Regulatory efficiency*

Telstra is proposing changes to the current access regime which we believe will meet the Panel's objective that regulation should be proportionate, transparent and accountable, including requirements for the ACCC to consider the costs of regulation, to report annually on measures to reduce the regulatory burden and the re-introduction of limited merits based review.

## 01 The need to refine the implementation of NBN policy

Telstra's purpose is to deliver a brilliant connected future for everyone. Improving customer service is central to this purpose. This involves simplifying our business, investing in our networks and our people, and innovating to bring new products and the latest technologies to market.

We support the Government's policy of bringing improved fixed broadband services via the NBN to all Australians.

However, the implementation of NBN policy has not been easy. The NBN has required a fundamental restructuring of the telecommunications industry, and this has presented great challenges for NBN Co, Telstra, other retail service providers (**RSPs**) and too often end-users. Industry participants have been reshaping their businesses, regulators resetting regulation, and policy makers responding to important issues – all trying to realise the NBN policy.

The Government's NBN policy proposing the use of mixed technology solutions can deliver a faster, cheaper and more commercially viable NBN, but the implementation of this technology solution will be even more complex and will require more careful and coordinated management, when simplicity and ease of operation is important for industry and end-users alike.

Telstra has used the opportunity that this review presents to take stock, set out what we have learnt, and put forward ideas to refine the implementation of NBN policy in a way that better responds to the needs of consumers and industry.

## 02 Retain Core NBN Principles

The core elements of the NBN policy have wide acceptance within the industry, and are now the basic assumptions underlying business cases, regulation and subsequent policy. It would be immensely difficult to unwind those changes. Accordingly, Telstra considers that the NBN Panel of Experts (the **Panel**) should recommend that all of the following core principles of the NBN remain in place:

- nationwide deployment of a wholesale-only superfast broadband network, with fixed network infrastructure to 90%+ of premises;
- structural separation of Telstra by migrating customers from existing copper and hybrid fibre coaxial (**HFC**) networks to the NBN (recognising that Telstra and NBN Co are negotiating over the use of these networks in a mixed technology solution);
- the current interim equivalence and transparency regime to apply until the Designated Day;
- NBN Co not to discriminate between RSPs;
- interconnection at the current NBN point of interconnect (**PoI**) locations are retained, on the basis that RSPs and competing wholesale backhaul providers have made many commercial decisions on the basis of those PoI locations; and
- the universal service obligation (**USO**) arrangements negotiated between Telstra and the Commonwealth remain in place to fund the continued supply of PSTN services.

However, Telstra believes the above principles could be supplemented by changes to improve the NBN implementation process and help ensure a more smooth migration of end-users to the new network.

## 03 What lessons should be learned from the NBN experience?

### Key points

The following are the main lessons from NBN implementation to date:

- The only regulatory instrument dealing with migration – Telstra’s Migration Plan – is essentially a disconnection plan. The lack of a more comprehensive framework allocating responsibilities between stakeholders has contributed to end-user migration processes which are incomplete, poorly co-ordinated, confusing and often result in a negative experience for end-users.
- NBN Co and industry has to date had insufficient focus on developing the range of products necessary to enable a migration of all services to the NBN and to meet the needs of end-users, in particular business customers, on the NBN.
- Too much of the detail of migration is locked into regulatory and contractual arrangements so that when experience shows some of the assumptions behind these arrangements are flawed, processes cannot be readily changed and poor outcomes result for end-users.
- Decision-making responsibilities are not allocated to the participant best placed to make the decisions. For example, the ACCC has been given responsibility for decisions on technical, operational and network design issues with which it is not well equipped to deal with. Moreover, NBN Co has assumed a de facto standards setting role, which, as the de facto fixed network monopoly, creates a potential conflict of interest.
- NBN Co has not typically shared enough information about its rollout plan (and changes) with industry or the public to promote the necessary awareness of NBN availability.

### 3.1. End-users need an integrated end to end migration process

There is currently no single framework within which responsibilities for NBN migration can be allocated. Close co-ordination is needed because only Telstra can undertake the disconnection step on its copper and HFC networks, only NBN Co can undertake the connection step on the NBN, one or more RSPs need to manage the interface with end-users, and third-party service providers (such as those supplying medical alarms) need to look after their customers.

We need to build an end to end migration process from an end-user perspective which describes the responsibilities of each participant and most crucially, identifies where one participant cannot take a required step until another participant completed a prior step or provides other assistance or information.

In reality, the current Migration Plan is a ‘disconnection plan’ because it only covers Telstra’s role. There are no parallel regulatory requirements covering the roles of other participants in migration: NBN Co in providing the infrastructure, wholesale products and connection process to enable the end-user a smooth transition to the NBN. There also needs to be an appropriate identification of the role of RSPs and other service providers in managing migration with their end-users, so industry is clear on where their responsibilities lie.

The following are examples of the resulting poor customer outcomes:

- i. Example 1 shows that because Telstra’s regulatory obligation to disconnect our copper network applies independently of any obligation on NBN Co to connect their fibre network, end-users can end up in ‘limbo’ without a copper or HFC service or an NBN service.

**Example 1 – Disconnection of premises without access to fibre**

Under the Migration Plan, Telstra has a mandatory obligation to disconnect Premises that have been 'Passed' by the NBN fibre network. Once a Premise is disconnected, generally Telstra is not able to reconnect it using its fixed copper and HFC networks and only in limited circumstances using its wireless network.

There is no matching regulatory or contractual obligation requiring NBN Co to connect or to be able to connect all of the Premises that are Passed by the NBN fibre network. Instead, NBN Co can declare some Premises as Passed but unserviceable by the NBN (referred to by NBN Co as 'Service Class 0' Premises). Telstra is still required by the Migration Plan to disconnect these Premises at the Disconnection Date in a Rollout Region.

The disconnection obligation was based on the assumption that Service Class 0 Premises would only occur at the margins of the NBN and could be managed by Telstra and NBN Co on an exceptions basis. However, experience with the rollout has shown this assumption to be wrong and there are substantially more Service Class 0 Premises than anticipated (on average, 32% of premises in Brownfield areas in September 2013).<sup>1</sup> It is clearly unacceptable to have end-users facing disconnection without the opportunity to connect to the new network, however that is a scenario the current arrangements have created.

- ii. Example 2 shows what has occurred where the ACCC wanted to address a concern but can only do so through its migration-related powers over Telstra, even though end-users may be better served if NBN Co or another RSP was required to carry out some activity.

**Example 2 – Regulating Telstra for activities undertaken by others**

One migration process which has proved challenging is the 'pull through' process, and in particular, the consents required from Telstra and others in industry where NBN Co decides to disconnect an existing copper line at a premise and uses the line to pull through a new fibre cable, as part of connecting to the NBN.

While the process involves Telstra's copper lines, it is undertaken entirely by NBN Co. Telstra does not play any direct part in pull through, but we agreed to take on a limited role as a 'post box' for obtaining certain consents and providing certain information between NBN Co and any of Telstra's wholesale customers that had services to a Premises where pull through was occurring. Telstra agreed to set this role out in its Required Measure 1.

In the course of approving Required Measure 1, the ACCC identified wider concerns about the impact of pull through on end-users. However, as the Required Measures process does not give the ACCC control over the activities of NBN Co or RSPs in the pull through process, the ACCC has found it difficult to allocate directly responsibility to those other parties. Instead, the ACCC has sought to address its concerns indirectly through Telstra under Required Measure 1 despite Telstra not owning the pull through process. This has delayed the arrangements being put in place, and will result in a second-best, and unnecessarily complex process.

A more balanced, end-user focused arrangement would allocate responsibility for an activity to the party that can most efficiently undertake that activity (NBN Co) and/or to the party best able to manage the effect on the end-user (in this case, the RSP).

- iii. Example 3 shows, there are a range of other providers of services and equipment in addition to Telstra, NBN Co and RSPs which fall outside traditional telecommunications

<sup>1</sup> As noted in the NBN Co Strategic Review Final Report, as at 30 September 2013, 73,506 out of 227,483 brownfield premises were Service Class 0 (p.41).

regulation but need to be involved in the migration process to ensure end-users have a seamless transition to the new network.

**Example 3 – Services utilising the copper network**

Third party services connected to Telstra's copper network include services such as 'back to base' medical alerts, alarm systems, EFTPOS or other payments systems and elevator phones. These services are usually installed and operated by companies which are not carriers or carriage service providers (e.g. alarm or elevator contractors) under agreements directly with end-users.

Disconnection of the copper service can result in the loss of these services, either because the NBN does not support the service functionality or the NBN has been connected to the premises wiring in a way which does not support a third-party device.

In most cases, NBN Co, Telstra and the RSP will not be aware that this type of service has been connected to the network at the premises and so are not in a position to put in place special arrangements to protect the end-user.

Telstra has been working with Communications Alliance over the last year to develop an Industry Guidance Note (IGN 004) that assists industry in dealing with third party services and equipment. This guidance note has been a positive step. Its development illustrates the need to strengthen industry-based processes by formally recognising their primary role in resolving NBN migration issues and also the need for all stakeholders to be committed to contributing to the delivery of the desired outcomes. The two major alarm industry associations were involved in the development of the guidance note but they do not represent all alarm providers. Telstra felt there was also opportunity for NBN Co (and possibly Government) to take a more pro-active role in informing consumers about alarm migration issues.

**3.2. Incomplete NBN product offering**

It has been difficult to convey a clear, simple message to end-users about the need to migrate to the NBN because NBN Co's limited product capability means that services and customers are left behind on legacy networks with no certainty about when they will be migrated in the future:

- i. The category of Special Services which survive the Disconnection Date in a Rollout Region currently covers every service other than standard telephony and broadband. Business customers are confused that some services are disconnected at their Premises while others can continue. Although we are almost half way through the five year period in which it was contemplated NBN Co would release NBN substitutes for Special Services, no White Papers announcing new products have been produced by NBN Co.
- ii. The migration process only applies to Premises and NBN Co has no obligation to connect non-premises. While some non-premises are standalone facilities operated by government authorities, such as traffic lights on poles, others are co-located at end-user premises, such as ATM machines or elevator phones, and again cause confusion for end-users and building owners when other legacy services at the Premises are being migrated to the NBN.

**Example 4: Special Services rollout experience**

As the first mandatory disconnection approaches, there are a substantial number of Special Services in the first 15 Rollout Regions.

Telstra was able to completely migrate customers from its copper network served from the South Brisbane exchange to an alternative solution, including some of the services which are treated as Special Services for NBN purposes.

This was not an easy task, and involved significant investment in product development until

FTTP or alternative solutions were found, such as for pay phones, EFTPOS and ISDN services. Our experience is that significant effort up front to develop solutions for services provided within the Exchange area made the migration process more straightforward to explain and implement for end-users.

NBN Co has to date not demonstrated a similar level of commitment to finding fibre based replacements ahead of the migration and the Ready for Service Date for many of the services provided in NBN rollout regions, which has undermined the incentive for some end-users, in particular businesses, to migrate to the NBN.

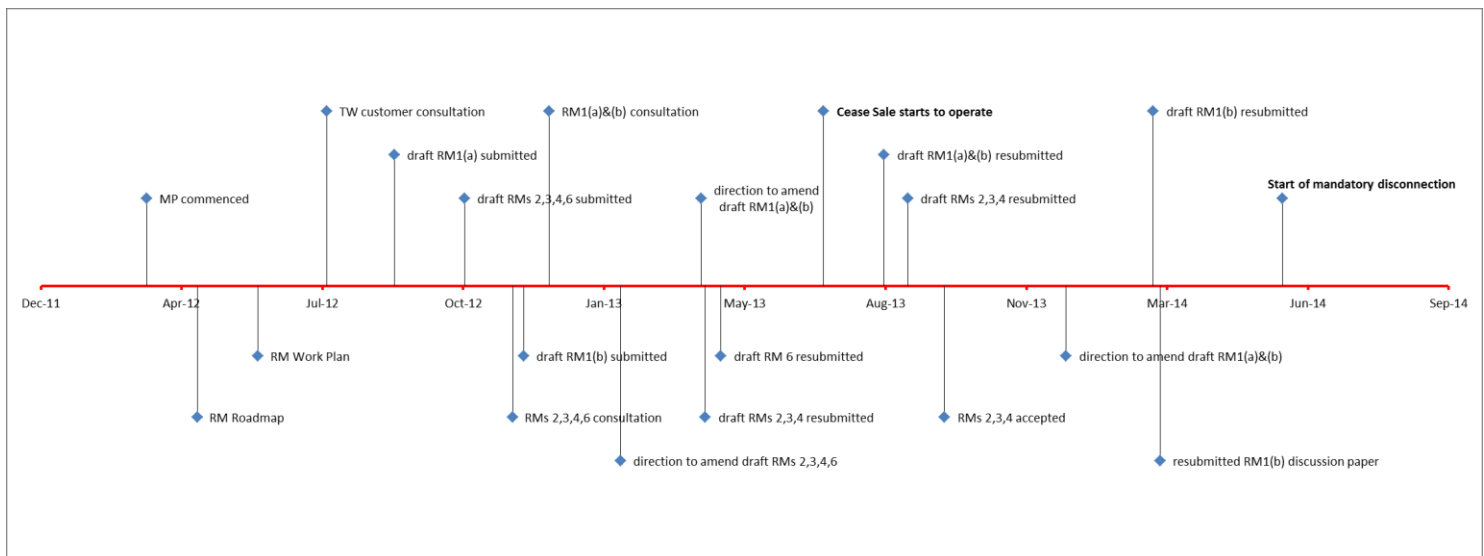
### 3.3. Decision making responsibilities not allocated to the party best placed to make decisions

#### i. Role of the ACCC

Many of the migration processes are largely of a technical, operational or process engineering character. The ACCC is an economic and competition regulator and as such is not necessarily most qualified to make decisions on process-related issues. Notwithstanding this, the current regulatory framework for migration allocates the ACCC responsibilities to approve (and direct the development of) technical, operational and process rules about the disconnection step in migration.

In part, this has explained the long time it has taken to have some of the Required Measures approved. The diagram below sets out the timeframe from when the Migration Plan commenced in early 2012 to the start of mandatory disconnection in May 2014. There are still Required Measures that have not been agreed over two years into the process.

**Diagram 1: Timeline of Required Measures approval process**



Over the same period, Communications Alliance has successfully led the development and agreement of several NBN-related code amendments and guidance, including all of the following:

- a) Practical guidance on cabling existing telecommunications services in customer premises for the NBN via FTTP (WG45 G649).



- b) An Industry Guidance Note IGN 004 on the Migration of Back-to-Base Medical and Security Alarms to FTTP Open Access Networks.
- c) A draft Industry Guidance Note on VoIP Quality of Service.
- d) A position paper on the technical considerations associated with deploying FTTP vectored VDSL2 technology (WC58).
- e) A draft code on fibre access transfer (customer churn) arrangements (WC53 G647).
- f) A number of other industry technical and operational documents in 2009-2010, while the Government's FTTP policy was still being formed which became part of the framework for FTTP deployment.<sup>2</sup>

ii. Role of NBN Co

As NBN Co is becoming the principal fixed network provider, the practical effect is that NBN Co is also becoming the de facto setter of key technical and operational standards within the industry, often without the involvement of the rest of industry. In Telstra's view, this gives rise to potential conflicts of interest.

**Example 5: Unilateral action by NBN Co on B2B interfaces**

Interactions between access seekers and access providers take place through 'industrial strength' 'business to business' (B2B) interfaces which, to realise efficiencies in interfacing with multiple customers and suppliers, are increasingly standardised. A Communications Alliance working group was set up in 2010 to 'localise' global IT standards for B2B interfaces. The Australian B2B versions have been re-accepted back into global standards. These B2B standards have been used by participants in the Australian market, including NBN Co.

However, NBN Co has proceeded to make unilateral changes to the B2B standards for its own network, outside of the Communications Alliance working group.

Telstra and other access seekers have argued that NBN Co's approach to unilaterally modifying the standard means that its own interests and priorities can be preferred over those of downstream providers and leaves us trying to 'catch-up' as we have to make changes to their own systems which might have been avoided or at least minimised with a more collaborative process.

Communications Alliance has requested that NBN Co revert to the industry based process to manage the B2B interfaces, but so far NBN Co insists that it should control the standards for its own network.

**3.4. Not enough flexibility to adapt procedures when problems with customer experience emerged**

Problems with the NBN migration arrangements have arisen because they were specified in too much detail in the first instance, were based on assumptions which turned out to be false, and the regulatory or contractual mechanisms made it too difficult to make the changes necessary to improve end-user outcomes. Because of the real costs and potential implications, the incentives of NBN Co and Telstra as contracting parties, and the ACCC as a regulator, were to seek substantial certainty up front as to how migration would be managed.

Examples of assumptions which have turned out to be wrong include:

<sup>2</sup> See: <http://commsalliance.com.au/Documents/national-broadband-network>



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- i. that by the time Telstra was required to disconnect premises from the copper and HFC networks, end-users would have ready access to an NBN connection (see Example 1 above); and
  - ii. that end-users would find the NBN products offered by RSPs attractive enough or would otherwise be incentivised to voluntarily migrate to the NBN during the 18-month Migration Window, and therefore there would not be a large number of end-users being mandatorily disconnected.

### 3.5. Not enough transparency on NBN rollout

Over the period of the FTTP rollout, NBN Co's approach to the publication of rollout information has changed. Originally, NBN Co proposed a comprehensive publication regime, where extensive information about its rollout planning and timeframe was published on its website. More recently, however, NBN Co has substantially reduced the amount of information which is publicly available on its website (as well as the amount which is made available to RSPs on a confidential basis, over the NBN's wholesale portal). Telstra and other RSPs are also limited by the NBN Co Wholesale Broadband Agreement from themselves publishing information about the rollout as NBN Co treats the information as being confidential.

This lack of certainty around what information will be made available publicly has imposed considerable cost and complexity on Telstra. We are required to retain complex internal 'ring fencing' and confidentiality protocols to protect rollout information, where it had originally been intended that this information would be made publicly available by NBN Co.

The point has been reached where, because NBN Co now treats its Region Ready for Service and other dates as confidential. Telstra's disconnection information published to industry is the first publicly available information for wholesale customers and end-users advising when NBN Co services are available in a rollout region, and when migration to the NBN is commencing. Full transparency of NBN Co's rollout plans is fundamental to RSPs, and end-users themselves, planning for migration to the NBN and NBN Co should be the key 'source of truth' for its own rollout information.

## 04 What principles should guide rebuilding the NBN implementation framework?

### Key points

- The problems end-users and industry face with NBN implementation will not be solved by traditional regulatory solutions because they are too narrowly focused, inflexible, slow, and adversarial.
- Telstra believes that an industry-led solution will best improve end-user outcomes by preferring collaborative, industry-based decision making within a framework of clearer policy direction from the Government. Recognising the competition and consumer issues potentially arising in migration, industry-wide rules would be lodged with the ACCC and it would have powers to direct industry participants to comply with those rules.
- The ability of RSPs and end-users to effectively plan for migration to the NBN depends on full transparency from NBN Co.
- Continued application of existing Part XIC of the *Competition and Consumer Act 2010* (CCA), if required, on the copper network until migration to the NBN, at which time Part XIC should be supplemented to include regulation of NBN Co's wholesale services when migration is completed.

In Telstra's view, the key take-out from the lessons of the FTTP deployment is that we need an implementation process that promotes 'problem solving' to improve the end-user experience of migration.

The NBN is a unique and transformational undertaking. As such, there have been and will continue to be challenges to which implementation needs to adapt and this will require more flexibility and opportunities for collaboration than currently exist in the present arrangements.

As the Minister has said in a different context:

*"Optionality, flexibility, dynamism, creativity have never, ever been more important. And if you think about it – of those of you involved in financial markets, you will know, the more volatile markets are, the more valuable optionality is. We have to be, in Nicholas Nassim Taleb's term, antifragile. We have to develop approaches, concepts, businesses, institutions, governments, dare I say, that are strengthened by change, that, like the muscle in your body, becomes stronger with exercise and responding to dynamic conditions, as opposed to being fragile so that when there is a change to the operating environment, you break."*<sup>3</sup>

#### 4.1. Why current regulatory models will not work

There is a role for traditional regulatory approaches to apply to Telstra prior to NBN implementation and to apply to NBN Co after implementation. For the following reasons these approaches cannot deliver the degree of flexibility and adaptability required for the transitional period, given the scale, complexity and required industry reach of migration:

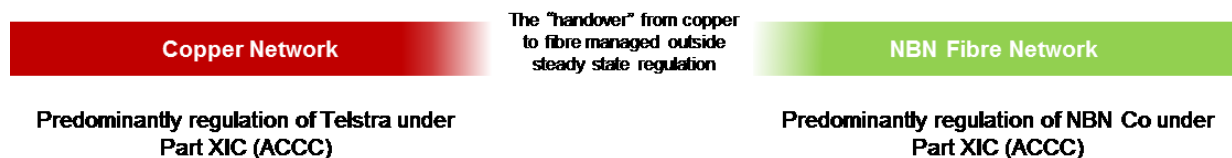
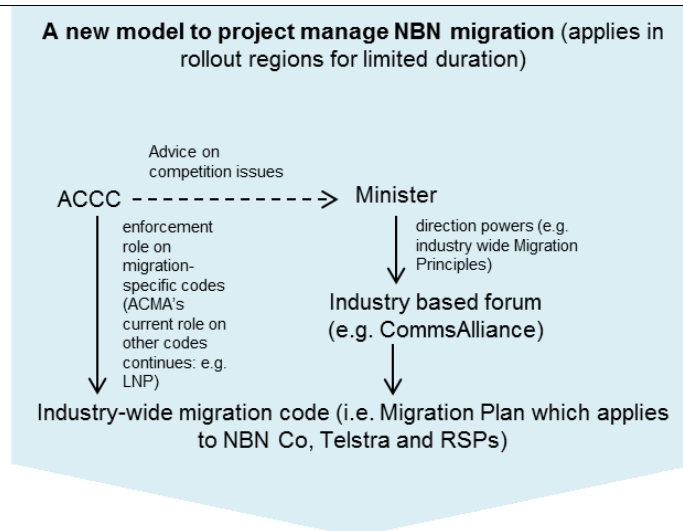
- i. The regulatory process is usually focused on the individual regulated firm – e.g. Telstra lodging a Migration Plan or NBN Co lodging a Special Access Undertaking – and the regulatory outcome usually only binds that party. For this reason it often cannot optimally deal with the entire issue at hand.
- ii. The regulatory process can be semi-adversarial and does not lend itself to a collaborative, problem solving approach. Often the regulated Firm produces a proposal on its own, other interested parties critique that proposal and then the regulator makes a decision which the regulated firms and other firms may not feel they necessarily 'own'.
- iii. The regulatory process is often slow and cumbersome as it needs to specify fixed, detailed outcomes. This means the process does not have the 'flex' to readily adapt as practical experience throws up unanticipated problems.

#### 4.2. Why an industry-led process of rule-making could work better

Telstra believes better end-user outcomes could be achieved by an industry-led rule-making process for NBN implementation. Such a process is illustrated in the following diagram:

#### Diagram 2: New model

<sup>3</sup> The Hon Malcolm Turnbull MP, *The 'Innovator's Dilemma' – Why incumbent businesses often fail in times of rapid change* at: [http://www.minister.communications.gov.au/malcolm\\_turnbull/speeches/the\\_innovators\\_dilemma\\_-\\_why\\_incumbent\\_businesses Often fail in times of rapid change#.Ux4nYPmSySp](http://www.minister.communications.gov.au/malcolm_turnbull/speeches/the_innovators_dilemma_-_why_incumbent_businesses Often fail in times of rapid change#.Ux4nYPmSySp)



Broadly, this industry-led model could work as follows:

- i. **More clearly focused on end-user outcomes:** rather than implement each step and regulate each participant in the migration process under separate, different processes, the Government's goal should be an end-to-end migration process that is a positive experience for end-users. As an industry process can have a broad focus on all types of migrations and technologies, it is also best suited to ensure a more consistent end-user experience and processes across numerous types of migrations and constructs.
- ii. **A 'clean break' with the legacy networks:** migration will be easier for RSPs and end-users to understand and manage if NBN Co and industry make the effort and investment upfront to develop a full range of NBN-based products and services so that there are no services or customers left behind on disconnection of the legacy networks. If the NBN is to have credibility as a substitute for the legacy networks, it has to be a network 'for all customers and all services', including business grade services and services to non-premises. If there are to be any exemptions, they need to be clearly justified by compelling end-user or technical reasons, narrowly defined and readily explainable and need to have a clear, pre-set date for migration in the future.
- iii. **Preference for industry-based solutions:** where migration is mainly about technical, operational and customer service issues that impact end-users, industry participants, not regulators, are best placed to collaboratively find migration-related solutions. Industry-based decision making can be more adaptive and responsive to industry participants' feedback regarding their on-the-ground experiences of NBN implementation. As the 'footprint' of participants is much wider than the ACCC's traditional jurisdiction – alarm companies, financial institutions, etc – an industry forum provides the best way to bring all relevant stakeholders together. That said, there is a backstop role for the ACCC to ensure that the industry-led solutions provide the right economic and competition outcomes.
- iv. **Refining the allocation of responsibilities between NBN Co, Telstra and other RSPs:** regulatory functions should be allocated to those who can most efficiently undertake that function. The Minister might give guidance as to who should be responsible for different

functions through amended Migration Plan Principles that apply to Telstra and other RSPs and a shareholder direction that would apply to NBN Co. The ACCC could have a role monitoring industry rule-making on NBN implementation. This would spare the ACCC from direct involvement in technical, operational and process engineering issues and allow them to focus instead on any economic and competition issues potentially speeding up resolution of processes. Also, NBN Co should relinquish responsibility for setting of technical standards on its network to industry-based decision making, such as through Communications Alliance.

- v. **Enhanced NBN Co transparency:** the Minister's industry-wide framework principles should require NBN Co to operate on a fully transparent basis by publishing its rollout plans and other relevant information on its web site (including promptly notifying changes), with disclosure to a subset of industry participants or Telstra only where the information and the circumstances reasonably require confidentiality. Transparency will:
- a) help ensure the migration process is based on what delivers the best outcomes and experiences for end-users – keeping the public fully informed about how and when migration will affect them. NBN Co should err on the side that more information in the public domain is better than less;
  - b) best address perceptions about non-equivalent treatment between Telstra and other RSPs, or other infrastructure-providers to NBN Co and the rest of industry;
  - c) provide improved transparency and certainty for industry about the NBN rollout and product readiness, enabling RSPs to plan their marketing activities and invest in their customer and product changes with greater confidence; and
  - d) substantially reduce the cost and complexity of compliance for industry associated with managing NBN Co information.

The industry-based codes would set out NBN Co's information needed at relevant steps in the migration process.

#### 4.3. What happens to current access regulation?

Telstra is not proposing substantial revision of current access regulation of the copper network. This regulation should continue to apply, as required, on the copper network in the lead up to migration commencing in a Rollout Region. The access regulatory framework would then engage on the NBN once migration was completed, through regulation of NBN Co's wholesale services. Telstra's approach recognises that given the unique nature of an industry wide compulsory migration process, we need a take a novel approach to facilitate the smooth migration of end-users from legacy networks to the NBN.

In section 6 below, Telstra proposes changes to the access regime to make it more efficient.

## 05 The scope of facilities based competition, new developments and the USO

### Key points

- If facilities based competition is to be permitted, there must be a level playing field between all alternative builders (including any NBN subsidy for new development build).
- Telstra's USO should be adjusted to reflect the deployment of alternative build by third

parties.

### 5.1. The need for a level playing field

Facilities based competition for broadband services can occur under current FTTP policy in greenfield estates, some metropolitan apartment buildings, and elsewhere as defined by legislation. The extent that this facilities-based competition to the NBN is permitted is a policy decision for Government. Telstra's position is that if facilities-based competition is permitted, there must be a level playing field between all alternative builders, whether under regulatory restrictions like the superfast broadband rules or under contractual commitments to NBN Co.

In relation to apartment buildings and other high-density premises, Telstra considers that if facilities-based competition is allowed, it should be allowed for anyone, not just those who fit inside a legislative loophole. Customers and alternative builders are currently facing considerable uncertainty as to whether competition will be allowed, leading to potentially inefficient outcomes. Telstra encourages the early resolution of this issue.

In relation to new developments, the current policy effectively shares supply of infrastructure in new developments between Telstra and NBN Co. As Telstra and NBN Co supply infrastructure under these obligations, they do not charge developers and end-users for the full cost of the infrastructure. As a result, other potential builders often do not find it commercially viable to build infrastructure in many new developments.

Therefore, to make a facilities based competition policy feasible in new developments, one or more of the following would be necessary:

- i. Revert to the pre-NBN approach where Telstra provided copper infrastructure and developers who wanted fibre infrastructure fully funded its rollout.
- ii. The Commonwealth (through NBN Co) provides subsidies to support alternative build. If this approach is adopted, the right to bid for the subsidies should be equally open to all suitably qualified alternative builders, including Telstra, and would need to include cost of telecommunications infrastructure within the estate as well as the cost of connectivity from the estate back into the network (backhaul).
- iii. A combination of (a) and (b) with partial subsidies for high cost areas (e.g. areas where the cost of establishing backhaul may be over a predetermined amount).

### 5.2. Better integrating new developments into the regulatory framework

The new developments policy would need to be integrated into the NBN and the current regulatory framework, and address the following challenges:

- i. Retail-based competition would likely depend on mandated access, since the cost to overbuild alternative networks may be prohibitive, particularly in greenfields areas. Further, recent work by the Communications Alliance Working Committee 58 indicates that it will not be possible for more than one FTTN VDSL2 provider to service an area or building using cabling within the same cable sheath without degrading the technical performance of the VDSL2 services.<sup>4</sup>
- ii. Interconnection costs will escalate, and could prohibit effective competition, if access seekers have to connect with a large number of individual networks across Australia. These costs could be reduced by requiring standardisation of wholesale interfaces between access seekers and the alternative builders. An alternative may be to require wholesale services on alternative networks to be provided through NBN Co.

<sup>4</sup> Refer to the Communications Alliance submission in response to the Vertigan Regulatory Issues Framing Paper.

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- iii. Standardisation of access products also may be required. Without standardised service level obligations such as fault remediation and connection timeframes, customer level outcomes across geographic areas may vary greatly. Standardised access products also may be required to ensure the availability, for example, of business class services and services to support non-premises locations, such as ATMs, alarms and pay phones.
  - iv. Better alignment between the USO and any facilities based competition model will be needed to ensure continuity of supply. As the universal service provider, Telstra currently has to 'step in' and deploy or divert network resources if there is any failure to deliver infrastructure over which voice telephony can be supplied. While there needs to be a 'fail safe' on telephony services, better, more efficient outcomes for end-users could be achieved if there was clearer delineation upfront of responsibilities between Telstra and alternative builders for supply of telephone services in new developments and there was more flexibility in service options for the universal service provider if it does have to step in.
  - v. Better coordination between developers and infrastructure providers. This could be addressed by a central clearing house that all developers seeking telecommunications infrastructure would have to notify and update which provider is contracted to supply the infrastructure. This would avoid confusion over who (or whether anyone) is building infrastructure in a development. New developments also are often 'stop and start' over a number of years depending on individual developers' finances, state and local government planning processes and housing market demand and supply factors. Providers (including NBN Co) may need to discuss with developers and other providers about how deployment is to be shared across phased developments. However, as providers are likely to be regarded as competitors for competition law purposes, these discussions can give rise to substantial legal risks. Some form of exemption from or authorisation under the CCA may be needed to facilitate these discussions.
  - vi. If the mixed-technology approach is applied to new developments, including third-party infrastructure which is counted as part of the NBN, consequential adjustments may be needed in the new developments' policy framework.
  - vii. A review of the "adequately served" policy to ensure that it is consistent with any change to accommodate facilities based competition.

## 06 Towards a more efficient access regime

The existing telecommunications regime in Part XIC of the CCA will continue to play an important role as the settled longer term framework. This will include:

- applying to legacy networks, as appropriate, during (and after) the NBN migration period, outside of the NBN footprint; and
- applying to NBN Co in relation to its supply of declared services over the NBN after NBN migration.

Telstra is not proposing substantial change. However, access regulation, with its associated monitoring and compliance reporting requirements, produces some of the most extensive, burdensome regulation. While access regulation may need to be firm specific, it is important to ensure that the proposed regulation, as implemented by the regulator, represents the most efficient way of addressing the underlying competition problem.

There is a need to address the strong, institutionally-embedded incentives faced by some areas of Government and its agencies. Too often these incentives are to impose burden on industry and the economy without proper consideration of the costs and benefits.

Access regulation is a necessary part of the regulatory landscape and if it has to be applied, it may necessarily impose heavier burdens on firms that meet rational criteria for firm-specific regulatory



controls, such as ownership of a bottleneck facility. Even then, regulators should consider whether firm-specific regulation is the most efficient way of addressing the underlying problem.

Telstra proposes the following measures:

- i. **Obligation to carry out processes and report compliance in accordance with the Department of Finance's Best Practice Regulation:** this would include the ACCC preparing a Regulatory Impact Statement with a complete and quantified estimation of the costs and benefits of any proposed regulation. Failure to do so should subject a decision to review and being made invalid. Government and agencies, including the ACCC should be required to review annually their compliance with the Department of Finance Best Practice Regulation.
- ii. **Obligation to contribute to or recognise the cost agencies impose:** so that there is better recognition of the costs imposed on firms, the ACCC should be required to compile and maintain a register of burdens on industry, including reporting and monitoring associated with access regulation, Telstra's Structural Separation Undertaking (SSU) and NBN migration, to be published in annual reports.
- iii. **Obligation to report on measures taken to reduce the net regulatory burden:** the ACCC should report annually on the measures taken to reduce the net regulatory burden, including on reporting and monitoring associated with access regulation, the SSU and NBN migration.
- iv. **Default sunset on all burdens:** all burdens should have a default sunset clause. This would encourage a culture whereby the default is regulatory forbearance. There would also be less effort needed to remove redundant but burdensome regulation.
- v. **Establish third party review of process/decision:** any individual or firm in Australia should have a right to challenge the decision of a Government or agency. Telstra proposes the establishment of a Regulatory Review Panel that would properly assess whether any regulatory decision of the ACCC or of the ACMA needs to be revisited. To avoid vexatious claims or gaming, claimants would need to establish the need for a review based on threshold criteria (for example, because the decision is not the most efficient of the alternatives available, the claimant has a reasonable case that the regulator has made an error, etc.). Further, claims should be subject to a preliminary quick-look evaluation process to remove claims that don't meet the relevant thresholds or that are vexatious. The restrictions on review of regulatory decisions adopted in telecommunications contrasts with recent experience under both Part IIIA of the CCA and the energy market. A recent review of energy regulation reaffirmed the importance of merits based review, with safeguards along the lines proposed by Telstra.



Annexure

	Panel Question	Telstra Response
1	<p>What broader structural model or models for the industry should the panel consider? Why? Should the panel be considering significantly different industry scenarios to those outlined above? If so, what are those scenarios and why should they be considered?</p>	<p>The core elements of the NBN policy have wide acceptance within the industry, and are now the basic assumptions underlying business cases, regulation and subsequent policy. It would be immensely difficult to unwind those changes. Accordingly, Telstra considers that the Panel should recommend that all of the following core principles of the NBN remain in place:</p> <ul style="list-style-type: none"> <li>• nationwide deployment of a wholesale-only superfast broadband network, with fixed network infrastructure to 90%+ of premises;</li> <li>• structural separation of Telstra by migrating customers from existing copper and HFC networks to the NBN (recognising that Telstra and NBN Co are negotiating over the use of these networks in a mixed technology solution);</li> <li>• the current interim equivalence and transparency regime to apply until the Designated Day;</li> <li>• NBN Co not to discriminate between RSPs;</li> <li>• interconnection at the current NBN Pol locations are retained, on the basis that RSPs and competing wholesale backhaul providers have made many commercial decisions on the basis of those Pol locations; and</li> <li>• the USO arrangements negotiated between Telstra and the Commonwealth remain in place to fund the continued supply of PSTN services.</li> </ul> <p>However, Telstra believes the above principles could be supplemented by changes to improve the NBN implementation process and help ensure a more smooth migration of end-users to the new network.</p>
2	<p>Should the panel consider and adopt working assumptions other than the ones outlined on page 5 above? How should the assumptions be prioritised and trade-offs assessed?</p>	<p>Telstra agrees with the Panel's working assumptions, except that we consider the assumption that "NBN Co will <u>primarily</u> operate at Layer 2 in the service stack to provide scope for downstream innovation and product differentiation" (emphasis added) should be stated as an unqualified 'bright line' between NBN Co's upstream de facto monopoly and downstream competition to safeguard against 'mission creep'.</p>

	Panel Question	Telstra Response
		<p>We discuss this issue further below in response to Question 3.</p> <p>There are inherent difficulties in prioritising a list of disparate criteria. However, in our view, the working assumptions identified by the Panel need to be directed towards the overarching objective of improving end-users' experience of the NBN. As we describe in our main submission:</p> <ul style="list-style-type: none"> <li>• end-users currently face a poor migration experience because there is not a single framework allocating clearly responsibilities between all participants in migration and requiring them to work together in building end-to end migration processes;</li> <li>• the NBN supports a too narrow range of products to meet the range of end-user needs – which results in NBN migration not being a 'clean break' with legacy networks (e.g. the range of Special Services which can remain connected to the copper network), migration is more difficult to explain to end-users and complex to implement; and</li> <li>• there is not enough transparency of NBN rollout plans (and changes) – further complicating planning by RSPs and confusing end-users.</li> </ul> <p>As the working assumptions will need to be applied by policy makers and regulators in on-going decision making, the design of decision making processes (including the incentives on decision makers) can be more important to achieve effective outcomes than any attempt at upfront prioritisation of assumptions. In particular, it is important to consider the following questions:</p> <ul style="list-style-type: none"> <li>• which decision maker is best placed or qualified to make the decision in relation to a particular working assumption?</li> <li>• what incentives does that decision maker face to ensure that "regulation should be no more intrusive or burdensome than needed, and should be proportionate, transparent, predictable and accountable in its operation" (the</li> </ul>

	Panel Question	Telstra Response
		<p>Panel's common working assumption across the other assumptions)?</p> <p>As described in our main submission, Telstra has sought to address these questions in relation to NBN implementation by proposing an industry-led rule making process, with the policy framework set by the Minister and an oversight and enforcement role for the ACCC on competition and consumer issues.</p> <p>More generally in relation to telecommunications regulation (including access regulation), we proposed incentives to address the strong, institutionally-embedded incentives that impose a burden on industry and the economy without proper consideration of their relative costs and benefits. These include requirements for the ACCC to consider the costs of regulation, to report annually on measures to reduce regulatory burden and limited merits-based review.</p>
3	<p>Should NBN Co continue to be subject to wholesale-only (structural separation) and open access requirements? If so, to what extent and under what circumstances, if any, should those obligations apply to other market participants?</p>	<p>Telstra endorses as core principles the NBN as the primary fixed local access network nationwide and NBN Co's role as a wholesale-only provider. However, we highlight the risk of NBN Co "mission creep" (by leveraging its de facto network monopoly and access to Government backed funding) in the following competitive or potentially competitive markets:</p> <ul style="list-style-type: none"> <li>• <b>Entry by NBN Co into backhaul markets:</b> NBN Co is apparently developing a product to connect cell sites, with the encouragement of some industry participants – this is a distraction from its mission to build a nationwide fixed local access network.</li> <li>• <b>Entry by NBN Co into downstream enterprise and Government customer sector:</b> The layer 2 limit has not been formally embedded under the NBN Companies Act. The only current restriction on NBN Co is limiting supply to carriers and carriage service providers. However, large customers can qualify for NBN Co direct supply as CSPs even if resale represents a small proportion of their overall communications requirements. Formalising the layer 2 restriction would be useful, but self-consumption of layer 2 services is not a significant hurdle to large corporates. The right to directly acquire services</li> </ul>

	Panel Question	Telstra Response
		<p>from NBN Co should be limited to the extent the NBN services are used to resupply to downstream customers.</p> <p>The extent to which similar restrictions apply to other market participants is bound up with the wider issue of the extent to which there should be facilities based competition against NBN Co. As discussed below, this is a policy issue for the Government, but a level playing field should apply, including as to the conditions on whether the alternative builder of infrastructure can be vertically integrated (see Question 5 below).</p>
4	<p>Should all market participants, including NBN Co, be subject to the same regulations to the greatest possible degree or are specific regulations that do not apply across the board necessary and justifiable in some areas? To the extent to which there should be specific regulations, what is the purpose, nature and scope of the differences?</p>	<p>In Telstra's view, the Panel's working assumption that regulation "should be no more intrusive or burdensome than needed, and should be proportionate" means that regulation (including the decision not to regulate) should apply equivalently to all market participants, except to the extent that there are material competition or consumer issues which are most efficiently addressed through firm-specific regulation.</p> <p>The need for firm-specific access regulation (Telstra on copper networks and NBN Co on fibre networks) should be addressed within the current access regime, with the proposals we made in our main submission to better ensure access regulation is "proportionate, transparent, predictable and accountable".</p> <p>As NBN Co will become the primary fixed local access network, competition issues justify a level of firm-specific regulation of NBN Co such as:</p> <ul style="list-style-type: none"> <li>• setting 'bright, immovable lines' around NBN Co's permitted activities to prevent it from leveraging its Government funded de facto monopoly to dominate competitive or potentially competitive markets (see above);</li> <li>• ensuring NBN Co does not become a de facto standards setter for the industry on next generation network (<b>NGN</b>) technical and operational issues – we recommend that industry-based rule making, such as through Communications Alliance, should be preferred to set standards for the NBN which have a common impact across access seekers or end-users; and</li> </ul>

	Panel Question	Telstra Response
		<ul style="list-style-type: none"> <li>requiring NBN Co to be more transparent about its network rollout plans and changes to these.</li> </ul> <p>Firm-specific regulation has sometimes been applied in the NBN context where it is not the most efficient way of dealing with the underlying issues. For example, the ACCC has sought to utilise its more direct powers over Telstra to solve migration problems when those problems would be better addressed by industry-wide solutions applicable to all RSPs or direct obligations applied to NBN Co. Our main submission provides as a case study the ACCC's approval of required Measure 1 dealing with pull through.</p>
5	To what extent should competitive neutrality between NBN Co and other market participants be ensured and if so, how?	<p>This question needs to be addressed at different points in the telecommunications "value chain":</p> <ul style="list-style-type: none"> <li>NBN Co should not be competing at all in downstream markets, and as noted above, the current line of business restrictions on NBN Co are too porous.</li> <li>The extent to which NBN Co faces facilities-based competitors in upstream markets is, as we submit, a matter of Government policy. However, if there is to be facilities-based competition, there should be competitive neutrality between third parties in building alternative infrastructure - including entitlement to any subsidies from the Government or NBN Co.</li> <li>Achieving competitive neutrality between NBN Co and the third party infrastructure providers give rise to complex issues which will need to be addressed in the policy decision to permit this form of competition. The previous Government used 'competitive neutrality' as the justification for imposing the superfast broadband requirements on third parties, by which the previous Government candidly acknowledged it hoped to achieve a de facto monopoly. However, if a third party infrastructure builder can fit within the statutory exemptions, it is able to operate on a vertically integrated basis without being subject to mandatory supply of regulated layer 2 services. A consistent policy approach is required to be applied to any third party</li> </ul>

	Panel Question	Telstra Response
		infrastructure provider in NBN rollout regions.
6	Where providers other than NBN Co supply fixed network services, should there be provisions that ensure consumers secure particular outcomes, for instance by comparison to those generally available from NBN Co?	This will depend on whether the premises served by the alternative network are to be treated as 'adequately served' for the purposes of the NBN. If 'adequately served', those alternative networks should be seamlessly integrated into the NBN, even if they are owned and operated by a third party provider.
7	Where an infrastructure provider other than NBN Co delivers outcomes comparable to those delivered by the NBN, what obligations or restrictions should apply on NBN Co? For example, should NBN Co be preventing from overbuilding that network?	The extent of facilities-based competition against NBN Co is a policy matter for the Government. However, private investors require a reasonable degree of certainty when making infrastructure investment decisions, including about the risks of overbuild by a Government-funded operator.
8	Were NBN Co to be restricted in supplying services in areas serviced to a specified standard by other network operators, what undertakings, if any, should those operators be required to give about their ongoing performance? Noting links with question 3 in relation to wholesale-only and open access requirements, would it be sufficient to rely on Part XIC processes to secure access to services on these networks, or on Part XIC processes that were further refined?	<p>The difficulty in addressing access issues through Part XIC alone would be that some of these networks could be very small and geographically confined networks, such as an in-fill subdivision of a few lots in a new cul-de-sac within a brownfields suburb. The better approach may be to automatically apply a mandatory layer 2 bitstream requirement (as it currently applies under the superfast broadband rules) to any networks designated as 'adequately served' for NBN purposes. This would then enable the ACCC to make an access determination and exercise its other powers under Part XIC.</p> <p>As discussed in our main submission, there are issues in addition to effective access regulation that would need to be addressed if there is a policy of promoting facilities-based competition, including:</p> <ul style="list-style-type: none"> <li>• minimising the costs incurred by access seekers to connect with a large number of small networks by either mandating a high level of standardisation of interfaces and products or requiring supply through NBN Co; and</li> <li>• better alignment with Telstra's USO – even though a third party has deployed the network, Telstra can be required to 'step in' to deploy its own standard</li> </ul>

	Panel Question	Telstra Response
		telephone services infrastructure to meet its USO.
9	<p>What are the essential characteristics that services provided over a network other than NBN Co's should have to meet for those services to be seen as operating on an NBN-comparable basis? For example, should it include the following elements:</p> <ul style="list-style-type: none"> <li>• ability to support certain minimum broadband speeds;</li> <li>• provision of wholesale services on an open access basis (possibly involving structural separation or some equivalent method of ensuring non-discrimination) and support for retail level competition;</li> <li>• an obligation on at least one provider to service all customers within a service area;</li> <li>• acceptable performance characteristics – for example in terms of latency, jitter, loss and network availability;</li> <li>• price structures and levels that provide affordable access;</li> <li>• credible, transparent and predictable upgrade paths to higher speeds;</li> <li>• the ability to support voice services and the various legacy services; and</li> <li>• clear and reasonable timeframes for connection and service restoration.</li> </ul>	<p>If the third party network is being treated as 'adequately serving' its footprint for NBN purposes, the operation of the network and the products and services offered on it must be configured to NBN Co standards, otherwise RSPs will face undue hurdles and costs in order to offer end-users consistent products and service levels across NBN and non-NBN network areas.</p>



	Panel Question	Telstra Response
10	To what extent should the provision of non-commercial services by NBN Co be funded through cross-subsidies, and if so, what safeguards, if any, should apply to those cross-subsidies?	<p>The availability of cross subsidies between profitable and non-profitable areas will depend on two decisions which are policy matters for the Government:</p> <ul style="list-style-type: none"> <li>• whether to retain the requirement for NBN Co to price on a uniform nationwide basis; and</li> <li>• the extent to which facilities-based competition is permitted.</li> </ul> <p>These policy decisions need to be made in a transparent and competitively neutral way.</p>
11	Were it not feasible or sustainable in a competitive market for NBN Co to earn sufficient revenue to enable it to cross-subsidise uneconomic customers, how should services to those customers be provided and funded?	<p>The need for a cross subsidy is inherent in the policy decision to provide for nationally averaged pricing. Whether NBN Co then incurs a loss operating within that policy setting in place is a matter, as in any business enterprise, for the shareholder.</p>
12	What approach should be taken in new developments? Do they raise particular structural regulatory issues?	<p>It is a policy decision for the Government whether to move away from the current approach where responsibility is shared between Telstra and NBN Co in new developments.</p> <p>However, facilities-based competition for new developments will not be economically feasible for third parties unless either developers are required to fund the full costs of the infrastructure (not just pit and pipe, as currently is the case) or subsidy is available (which should be available to any qualified third party operator).</p> <p>The structural issues which would need to be addressed if there is facilities based competition for new developments include:</p> <ul style="list-style-type: none"> <li>• effective access regulation as these networks are likely to be 'mini-monopolies';</li> <li>• standardisation to reduce interconnect costs faced by RSPs and to ensure end-users can be provided with consistent service and products across the</li> </ul>

	Panel Question	Telstra Response
		<p>NBN and third party new developments (alternatively, consistency could be achieved if services on third party networks are required to be supplied through NBN Co);</p> <ul style="list-style-type: none"> <li>• better alignment with Telstra's USO to ensure improved end-user outcomes if there is a failure to provide standard telephone services on the third party network; and</li> <li>• a framework for co-operation between NBN Co and third party builders to reduce confusion about who (or whether anyone) is proposing to build infrastructure in a new estate: for example, a nationwide clearinghouse to process developer requests.</li> </ul>
13	Should responsibility for the economic regulation of telecommunications remain with the ACCC?	Telstra is not proposing substantial changes in the access and telecommunications competition regime. However, in our main submission, we proposed measures to address the Panel's working assumption about the need for "regulation should be no more intrusive or burdensome than needed, and should be proportionate, transparent, predictable and accountable in its operation". These measures include requirements for the ACCC to consider the costs of regulation, to report annually on measures to reduce regulatory burden and limited merits-based review.
14	<p>Overall, the panel is most interested in stakeholders' views as to what should be the preferred structural model overall and why.</p> <p>In putting forward such models, however, stakeholders should also have regard to their practical implementation, including issues of cost and service migration.</p>	<p>Telstra believes the experience to date has shown that the uniqueness, scale and complexity of NBN implementation cannot be effectively managed within a traditional regulatory framework, which is too slow and inflexible, not well suited to dealing with technical and operational issues, and does not apply to all the stakeholders who need to be involved in implementation (ranging from carriers and RSPs to alarm companies and medical alert service providers).</p> <p>Telstra believes better end-user outcomes can be achieved by an industry-led process of rule-making for NBN implementation, within a framework of Ministerial Migration Principles which would apply not only to Telstra but all industry players. The ACCC could be the regulatory authority with which industry rules are lodged and which has the power to direct compliance, which would ensure competition and consumer issues</p>

	Panel Question	Telstra Response
		<p>are addressed.</p> <p>Where appropriate, access regulation would apply to Telstra on its copper network (and on other parties' networks) up to commencement of migration in a rollout area, migration would be managed through this new industry-based process, with access regulation then mandated through regulation of NBN Co's wholesale services once migration is completed.</p>
15	<p>Stakeholders should also feel free to raise such other issues and proposals they believe are relevant, particularly in relation to how the panel should tackle the task before it. Stakeholders should note the panel's intention to consult further on more detailed issues.</p>	<p>In its scale and complexity, NBN implementation is a novel undertaking. The Panel should not be constrained by traditional regulatory models in refining the approach to the challenges of NBN implementation.</p>