Submission to NBN Cost Benefit Analysis

March 2014

The Benefits of Universal Broadband

The CCC strongly supports that the decision by both the present and previous Federal Governments to make the rollout of broadband, to all Australians, a priority.

It is not an exaggeration to say broadband – both fixed and wireless – has become the fundamental platform on which social and economic activity is built and its importance continues to grow. It is the single most important driver of productivity in a modern economy. Where retail competition has been strongest, the investment in innovative services has seen material improvements in consumer choice, services and prices in very short time frames.

The transformative effect of the widespread availability of broadband has been so profound and rapid that it is sometimes difficult to keep sight of how much has changed in the past 20 years as broadband has changed consumer behaviour and business models.

Some examples of the ways the changes are:

- financial services, such as banking and insurance, have become almost unrecognisable from the time when transactions were based on passbooks and branches
- online retailing has empowered consumers to acquire goods from a global market, where as recently as a decade ago they might have had no access to a choice of supplier. This is especially true for non-metropolitan consumers.
- Products have not only been developed in digital formats but, in some cases, such as music, digital formats have become the dominant format within a decade of release
- Customers' expectations of the availability of products, services and information have transformed in a decade. They now expect instant, mobile access, ordering and fulfilment.
- alternative digital currencies have begun to emerge to further facilitate this new digital, global commerce
- Online payments for services has become so pervasive that the idea of physically travelling to pay an invoice or post a cheque is now an alien concept.
- Broadband access has emerged as a criterion for both real estate valuations and business viability.

These few examples serve to illustrate the enormity of the social and economic revolution that is occurring. Far from showing evidence of slowing, the changes are accelerating. For example, less than seven years since the launch of the iPhone in 2007, one billion smart phones were shipped in 2013, representing 55 percent of mobile phones.

Indeed, universal access to broadband has become a pre-requisite for individuals to participate fully as citizens in the digital economy and for national economies to remain competitive.

However, these national productivity benefits are externalities in that the broadband network owners facilitate the activities but are not, and should not be, in a position to capture the value.

It is clear that where there is significant market power:

- There is an incentive on private investors seeking to recover their high capital costs from broadband rollouts to seek to capture value in ways that are inconsistent with maximising national welfare
- Broadband access networks exhibit bottleneck characteristics
- The form of industry organisation that maximises the opportunity for competition and consumer benefit is for the access network to be structurally separated, and wholesale only.

In these circumstances, the CCC believes the role of government in accelerating and expanding the rollout of genuinely high speed networks, and ensuring that they are rolled out in circumstances that maximise the consumer welfare from their deployment in the long term, should be non-controversial.

We recognise that there are a number of policy approaches to deliver an efficient market outcome. However we urge the Committee to take a pragmatic approach and recognise that we are constrained by the decisions of the past. Yes, there are areas of improvement for the NBN, but Australia's NBN model is the best foundation that we have to deliver an optimal outcome in this market.

Background – where do we want to be in 2022?

The guiding principle behind the NBN, and the CCC support for the initiative, is the need to create affordable, universal, viable, resilient, sustainably competitive and innovative markets for communications services to end users. The NBN is the ideal vehicle to achieve these aims, especially when taken in the context of the circumstances that have historically prevailed in Australian communication markets.

The CCC submits that a central objective of the cost benefit analysis — with regard to the remit of the NBN Co and policy and regulatory arrangements in which it operates — must be to achieve the optimum benefits in the terms outlined above.

It is crucial to explicitly consider and account for the fact that, while the public investment in the NBN is intended to create competitive retail outcomes, private investors can be motivated to invest by the opportunity to lock out competition and gain enduring market advantage, particularly investment by enterprises offering retail services.

The focus of public policy should be on achieving the optimal outcomes for users – residential and business – and the national interest, not on protecting the sectional interests of private investors. This is one of the principles supporting the success of the National Competition Policy reforms of the 1990s.

It is also therefore crucial that this inquiry does not lose sight of the fact that the primary justification for the public investment in the NBN is that the benefits of structural reform could not be achieved if it were left to the private sector to invest in an upgraded, universal access network. The undoubted national welfare benefits from a structurally competitive industry can only be fully realised through public intervention.

Within this context, the CCC has long been of the view that NBN Co should articulate simply and clearly its vision of how a competitive and vibrant communications industry, with a fully built and operational NBN, should be structured.

The CCC submits that by articulating such a vision, NBN Co would allow stakeholders to gain a clearer understanding of what underlies its business decisions and bring into focus areas of difference with stakeholders, allowing them to be reconciled or at least better accommodated, thereby narrowing the scope for disagreements.

For its part, the CCC has for many years been of the view that the business boundaries of the NBN should be defined by what the CCC believes has clearly been established as that part of the network that exhibits bottleneck characteristics. Beyond those boundaries, competition, supported by robust regulation, should be employed to ensure competitive outcomes are maximised.

That is, an NBN should be a structurally separated as a wholesale only, non-discriminatory, open access supplier of last mile access services. The integration of wholesale and retail, and ownership and operation of the ubiquitous access network by the vertically integrated incumbent, has been the primary cause of the failure of policy and regulatory arrangements to deliver the robust and enduring competitive outcomes that were intended and expected from the reforms to the telecommunications industry in 1997.

These arrangements should, in the CCC estimation, create the conditions to allow an open and competitive retail market <u>and</u> an invigorated and growing wholesale market.

The CCC has never held the view that wholesale markets would necessarily be "sacrificed" by the policy decision to create an NBN. On the contrary, constraints on successful wholesale market entry caused by the integration of the incumbent owner of the legacy access network would be resolved by the right structural arrangements, supported by focused regulation.

The CCC believes the experience in the UK, where functional separation of BT allowed the entry of retail-only consumer brands into broadband, based on the re-sale of white label services developed by competing telco wholesalers, provides an example of how quickly markets can respond to structural reforms.

The CCC last year published a list of principles that it believes must inform policy related to the NBN.

The principles are:

1/ All policy must lead to the development of an industry structure that is conducive to maximising competition. Competition is the best driver of consumer and national welfare. Policy must give primacy to the promotion of effective competitive markets for the provision of national communications services.

2/ Structural separation of "essential facilities" (that is, facilities that exhibit natural monopoly characteristics) is a necessary condition for the promotion of competition in existing and emerging markets.

3/ Even with structural separation of essential facilities, there should be robust price regulation of access to those facilities. Regulated prices should be based on established and consistent principles to promote the long-term interest of end-users, prevent monopoly rents and network "gold plating".

4/ Wholesale communications markets are national by nature, and thus regulation and policy must be national.

5/ Policy should avoid locking-in legacy technology that inhibits competition or which leads to the future reintegration of retail businesses with monopoly network elements.

6/ Policy to upgrade existing fixed line networks must be based on structural separation of the monopoly element and specify a pathway to the FTTP that enhances future competitive opportunities. Any upgrade pathway must reflect the principle that all developments must lead to greater competition over time.

7/ Regulatory pricing and access principles should be maintained and enhanced, and arrangements where competition is "traded off" to encourage investment in the short term – through, for example, regulatory holidays – avoided.

8/ In locations where a return is not sufficient to support commercial infrastructure investment, policies to encourage investment should promote competition and open access. Policy must avoid subsidies that entrench the dominance of the major incumbent and improve its market position. For example, Government funding should not subsidise the expansion of Telstra mobile network coverage without establishing open access arrangements and equivalence principles consistent with those being implemented in fixed line network regulation.

Infrastructure Competition – What Are We Talking About?

The panel framing paper, and much commentary about the present process, has raised the issue of infrastructure competition.

The CCC believe that discussion about the merits of infrastructure competition in the context of the NBN and last mile networks sometimes suffers from confusion between quite different concepts. The CCC believes that discussion of infrastructure-based competition in the context of NBN policy in Australia most commonly refers to either:

- Intermodal competition, where two (or more) different networks connect to one location, or
- The ability of alternative infrastructure providers to displace the NBN as the last mile provider to a particular user or set of users.

1 Intermodal Competition

The term infrastructure competition has historically referred to what has also been called inter modal competition. That is, the competition to deliver broadband services between established access networks, using different technologies, built in the same locations and often jointly connected to residences.

In practice, this has described competition between telecommunications networks built to deliver traditional voice services that have been subsequently upgraded to be xDSL capable, and cable TV networks built to provide pay television, also upgraded to deliver broadband access.

Advocates of inter-modal competition point to markets such as the US and Canada where there has been a contest for consumers based initially on availability, then price, and in recent years download speeds between cable companies and telcos.

This story of telecoms and Cable TV networks competing in these markets has been influential with economists and policy makers, but the CCC submits evidence from real world market activity in Australia is much more equivocal.

The CCC questions the relevance to future policy and regulation of these historical events in overseas markets to the Australian market in 2014. Firstly, the competing access networks were established in conditions set as far back as the 1970s in the US, which precluded incumbent telcos from owning cable TV networks in most locations. The broadband market realised the benefit of this far sighted policy 1990s-2000s. It is important to note that broadband services, while now the main game, were initially adjacent market opportunities for both Cable and telecommunications networks, not the core business for either when the networks were built.

Secondly, the access obligations on incumbent telcos in the US in the 1990s were far clearer and more robust in the US than Australia, which led to the rapid emergence of market entrants offering broadband services over the telecoms infrastructure. This in turn promoted competitive responses by both integrated incumbents and cable companies. The introduction of ADSL services in Australia was several years behind that of the US.

The later emergence of ADSL in Australia followed the disappointing HFC rollout experience of the 1990s when neither the Telstra and Optus HFC networks provided material inter-modal broadband competition. This occurred at a time when cable TV networks were market share leaders in developing broadband markets in leading early broadband adoption nations such as the US.

Rather, the Australian experience demonstrates very clearly how a vertically integrated incumbent, allowed to invest in an alternative access technology, will act against a set of incentives that cause it to act counter to what policy makers and regulators would like to achieve. The decision by Telstra to overbuild the HFC network footprint of the Optus cable network was clearly competition-destroying in the long run and caused both companies to stop their rollout and never expand the footprint.

The definition of infrastructure competition that regulators have applied in regard to the last mile access network has recently further blurred the definition of intermodal competition. The actions of competitors in accessing the unbundled local loop service to install DSLAMs in Telstra exchanges has sometimes been described as infrastructure competition, even though competitors are still required to gain access to numerous bottleneck inputs from Telstra, including the copper loop itself and access to exchange buildings and associated services.

Despite this reliance on the incumbent, the Commission, determining that ULLS-based services constituted infrastructure-based competition, proceeded to exempt many exchange areas from regulation.

That the Commission subsequently reversed these exemptions, and late last year removed similar exemptions in CBD locations where it had been determined that there was abundant competing infrastructure, shows the peril of basing policy on faith in inadequate definitions of infrastructure competition rather than an understanding of actual market and industry circumstances.

2 Alternative Last Mile Providers

The second and more recent use of the term infrastructure competition refers to situations where an alternative network builder proposes to build an access network before, and instead of, NBNco. Again, there are two circumstances where this arises, greenfields and brownfields locations.

The CCC submits that the experience and prevailing conditions in Australia are such that, except in a small number of locations, fixed line last mile access should be regarded as a bottleneck. There is some competition between wireless and mobile networks with fixed line networks, but these networks are also complementary in many circumstances. There also may be some individual users whose data requirements are so heavy that alternative fixed access is economically viable, but these are not common.

This is reflected in the fact that the discussion about infrastructure competition and the NBN is often, in fact, a discussion about whether other providers should have the right to build last mile connections to customer locations, on the basis (often unstated) that it would be uneconomic to overbuild the “first mover” in these locations.

That is, NBN Co would be displaced as the monopoly access supplier to specific locations by alternative providers.

The discussion, then, is about if this investment should be allowed and, if so, the structural and regulatory circumstances that could prevail to ensure that the users were not left as second class citizens when it came to access to competitive retail options.

A number of things need to be clearly established and allowed for at the outset to avoid disadvantage to some citizens and years of regulatory tweaking.

There is very clearly potential that short term incentives could exist for a “land grab” for customers in low cost and/or high value locations during the NBN rollout period in order to lock in market power in fixed line markets for those users. This raises the prospect some Australian users could be “marooned” on islands of constrained competition, inadequate to deliver the benefits of wholesale and retail competition otherwise facilitated by the NBN.

The CCC further submits that any policy approach that allows alternative infrastructure owners to “cherry pick” and subsequently operate alongside or in place of NBN Co cannot ignore the practical reality of present market conditions and the likely commercial market response of the various market participants.

The ongoing strong incumbency position of Telstra means it historically has responded differently to policy and regulatory settings to other market participants. Telstra remains in a position where there are strong incentives for it to leverage its existing market power, dominant wholesale and retail market share, and historic control of bottleneck network assets to maintain advantages deriving from its network ownership.

Were it able, Telstra would be in a uniquely privileged position to cherry-pick locations where it could roll out its own last mile infrastructure and would be uniquely motivated and able to leverage the advantages of vertical integration to constrain competition in doing so. This would be an outcome completely at odds with the policy objective of creating a structurally separated industry where the incentives of the access network owner were aligned with the policy of creating an even competitive playing field for retailers.

However, the CCC acknowledges that there are arguments for allowing other parties to build access network assets. One argument in favour of allowing alternative last mile rollouts is that it would provide a discipline and mitigate against NBN Co gold plating or over investment, and a benchmark against which to measure its ongoing operational costs.

The CCC notes that some market participants wishing to build and own FTTH networks in greenfields locations propose to do so on the basis that they would be wholesale-only, non-discriminatory, open access businesses with no retail business. Such an arrangement could provide a cost discipline on NBN Co without undermining the policy principles the CCC and the Government have subscribed to. They would also have less impact on the NBN business case because they would represent additional customer locations, not established high value consumers.

By contrast, in the case of brownfields locations where it is proposed that alternative network build into the basement of multi dwelling units, this would have the effect of “cherry picking” the cheapest-to-access locations. This in turn would limit the value of these investments as a discipline on NBN Co.

Cherry picking could have harmful effects on the competitive environment if the cost base of NBN Co is materially affected. If, for example, vertically integrated enterprises to displace the NBN Co in the cheapest to service locations, this would both raise NBN Co’s prices and allow a vertically integrated competitor to enjoy cheaper underlying costs than other retailers, even if those alternative suppliers provided wholesale access services at prices equivalent to NBN prices. The competitor would be able to capture above cost rents.

In effect, more remote or disadvantaged consumers would subsidise the owners of assets providing services in low cost locations, through higher access prices paid by RSPs accessing the NBN nationally, in turn having the effect of inflating prices for all users.

The CCC submits that there are numerous policy options to address these difficult issues. However, the CCC notes that it believes the policy did not foresee that the provisions allowing existing networks to be extended in limited circumstances would give rise to investments that connect MDUs in the way proposed by some industry participants.

The Government’s intention in other parts of the package of legislation introduced to create NBN and restructure the industry suggests clearly it was not the intention to allow cherry picking to occur.

To that extent, the CCC believes that it is appropriate to describe the activity in brownfields locations as representing a “loophole”. While the extent of the footprint available to some of those presently intending to extend networks to MDU may be limited to the extent that it would be immaterial to the overall market, if the loophole was to be available to Telstra, it could undermine the integrity of the structural separation principle.

Such a situation would undermine the integrity of the entire reform package.

The CCC therefore submits that in relation to brownfields areas, any non-NBN Co high-speed network build must strictly conform to the NBN Co requirements of open access, wholesale only, non-discrimination and be structurally separate.

NBN Pricing Arrangements

The CCC submits that the Panel should be minded of the anxiety in the industry that many contentious matters – such as structural separation, the NBN Co and the future of the HFC as separate networks – have been settled and the industry has moved on to plan and invest accordingly.

However, it is noteworthy that the ACCC has accepted industry concerns with regard to the pricing arrangements in earlier iterations NBN Co Special Access Undertaking and agreed that these pricing arrangements need to be subject to regular review.

One aspects that the CCC believes could be usefully considered is whether NBN Co should offer an “open pipe” access product in addition to the graduated speed services it has initially taken to market.

The CCC is aware that there are strong arguments that such a service could create the potential for greater competitive innovation, as occurred when access seekers built their own DSLAM networks using the Unbundled Local Loop and offered consumers ADSL2+ at whatever speed was technically possible over their line.

This potential for innovation needs to be balanced against the potential competition-enhancing impact of the defined wholesale speeds approach that the NBN Co has taken to market, with the approval of the ACCC.

The CCC submits that these issues were not the subject of sufficient public discussion through the development of the SAU as NBN Co choose not to engage with access seekers explicit on them when developing its proposed prices. A more public examination is warranted.

Future Universal Service Obligation

The CCC has long argued that:

- The USO is outdated and anti-competitive in its application
- The creation of a universal, publicly funded National Broadband Network should be seen as a complete replacement for the USO as it guarantees all Australians access to a modern communications network.

Unfortunately, the process of negotiating Telstra participation with NBN Co in the rollout of the NBN resulted in the worst aspects of the USO being locked in for 20 years, and the creation of a new bureaucracy (TUSMA) to oversee transfer payments from the competitive industry to Telstra.

The CCC believes the cost of the existing USO should be borne by Telstra. This is consistent with the findings of the Departmental review of the USO from 2004.

Further, the USO obligations should cease to exist in locations where the NBN is activated. If there are disadvantaged users that the Government believes should be assisted in accessing retail services, this should be treated as a welfare program separate from communications policy.

Finally, the services defined under the USO such as the Standard Telephone Service should not be applied in locations where the NBN is activated. These services reflect a set of technologies and consumer expectations that are no longer relevant.

Contact

The CCC would be pleased to provide further information to the panel if it is deemed useful

Please contact

David Forman

d.forman@cprcomm.com.au