Submission in Response to the Minister's Invitation for Comments on Telecommunications Regulation

June 2008

Introduction

The Competitive Carriers' Coalition is an industry association representing the interests of non-dominant carriers in telecommunications markets in Australia. The members of the CCC have collected invested in the order of $5 billion. They operate in fixed line, mobile, broadband, voice, corporate, residential and government markets. They have pioneered broadband via ADSL2+ and VDSL, and 3G mobile technologies.

The CCC welcomes the opportunity to respond to the Minister's call for submissions on telecommunications regulation in the context of the National Broadband Network process.

The CCC considers the decisions that will be made in the next year to be the most important in relation to communications markets for a decade. This is not because of the $4.7 billion of public money that could be contributed. Indeed, this is a matter of lesser long term importance than the implications for the policy and regulatory arrangements that will be considered and resolved through the process of determining who should build, own and operate a new network, and the conditions under which they will do it.

For this reason, the CCC discusses at some length the implications it sees as requiring careful consideration by the Government and the expert task force.

Further, the CCC would request the opportunity to meet with the expert panel to expand on several of the points raised in this paper that the CCC does not believe have been fully ventilated, or even discussed at all, in the public debate to date.

The CCC would be happy to make itself available to the expert panel at a time and place convenient to the panel.

Telstra Position Summary

The CCC notes that in recent days there have been a number of comments by Telstra that the CCC interprets as representing Telstra's position with regard to appropriate regulatory arrangements for an NBN. The CCC understands the main points of this position to be claims that Telstra requires:

- the right to a new, unregulated monopoly,
- that Telstra alone be able to decide whether or not to provide access to this monopoly to any of its competitors,
- that Telstra will choose if Australians have a choice of telecommunications provider,
- that the Government reject the clearly necessary structural reforms that you and many others have called for over the past several years, and

- that the lessons of other countries and other industries be ignored in order to allow Telstra free rein in the Australian communications markets.

The discussion below addresses the underlying arguments to each of these points, which the CCC regard as wholly unacceptable. For any major investment of national significance to be sanctioned under such circumstances is beyond comprehension. That this investment is part-funded by taxpayers merely serves to make these demands obscene.

It is clear that Telstra intends to ignore the conditions set out in the national broadband network request for tender documents, and to ignore the overwhelming community demands for stronger competition rules in order to secure better choice, prices and services for all Australians.

The Government cannot allow this to occur.

Threshold Questions

- *Fibre-based Broadband when and how?*

It has been clear for more than a decade that the transition of access networks was toward a fibre-based architecture was inevitable. It has been simply a question of when it would happen, and what would be the catalyst.

There have emerged a number of different catalysts in recent years in different parts of the world. The most important are:

- Operating cost savings
- Competition from other industries moving into traditional telecommunications markets
- Demand and supply push for new products, especially broadband, and
- Political pressure to maintain the pace with other countries.

The latter two catalysts have frequently combined, especially in situations where incumbent telecommunications companies have determined that they can leverage regulatory advantage from promising to deliver new or more extensively available broadband services or, conversely, withhold those services unless they gain regulatory concessions.

Balanced against these imperatives is the risk that private sector proponents ascribe to the investment, which requires a judgment on their part about anticipated demand, and therefore available revenue, on the one hand, and the danger that another provider will build a network before them and capture the market.

The questions about the appropriate timing of fibre rollouts to allow broadband have been debated with more vigor in countries where competition has resulted in a relatively faster

and more affordable broadband service rollout than has been the case in Australia. This is especially true where there has been strong competition between providers using xDSL and cable technologies to deliver broadband.

In these countries, the debate about the timing of FTTx deployment has been more focused on the pace of development of demand because government intervention has not been required to drive broadband where competition has done the job to date. In the UK, for example, the rapid expansion of competitive xDSL services using the LLU service and the availability of 4-8mbps to all or almost all consumers has led BT to argue that there is not the necessary demand to pay for an expensive new network at this time.

The sense that there is a near term imperative for a deep fibre network in many European countries seems to owe more to political priorities than business conditions.

This has given rise in much of the world to questioning of the incentives necessary to promote a near term build of FTTx networks, and what role the Government has in creating these incentives. Internationally, this has been a debate about what is needed to create the catalyst for industry to invest in new fibre access networks in the absence of a compelling business case. In a sense, it has been a debate about how to get someone to "take the leap of faith" and invest ahead of clear evidence of short term demand.

That is, the incentive debate is a discussion about whether the Government has a role in making this "leap of faith" happen.

The OECD has recently considered the role-of-government issue and has identified three roles that governments can play:

1. Stimulator, which is removing barriers to investment,
2. Producer, which is actually investing and
3. Regulator, which is what the government does to create a competitive marketplace.[1]

The OECD notes, however, that the basis on which the Government intervenes and the points in the market where it does so must be clear and with defined objectives:

> "A well-defined policy, which is discussed with industry and other stakeholders, with clearly stated goals and timelines, can help identify where bottlenecks are and which areas may be unprofitable. On the basis of such a policy the government can base its decisions to stimulate or to intervene." [2]

Where does Australia fit in the incentive debate?

The "incentive to build" debate is irrelevant in Australia for one simple reason. The Government has acted in Australia to fulfill the three roles described above, and to answer the threshold question of when to build.

[1] OECD Developments in Fibre Technologies and Investments
[2] ibid

While there is disagreement about whether aspects of the processes put in place are adequate to achieve the best outcomes (e.g whether timelines are unrealistic and whether there is sufficient clarity about the Government's preferred outcomes in terms of industry structure) sufficient has been done to say that the issue of creating an incentive to catalyse the investment decision is no longer an issue in Australia.

It is important to understand, therefore, that when the term "incentive" is now used in Australia, it is discussed in a quite different context to that in which it is used in other places. In the Australian context, incentive is most often used specifically with reference to what Telstra refers to as its requirements for investment returns. This is not a matter requiring public policy changes to encourage Telstra to build because the Government, as discussed above, have established the conditions under which the decision to build will be made.

To put this another way, the hurdle that must be cleared for an investment is the risk associated with the investment, which affects the timing of the decision to commence. This timing issue in Australia is resolved, and an incentive to mitigate risk has been offered in the form of financial participation by the Government. Respondents to this offer will each price the value of these Government actions in their own requested rates of return.

Claims by Telstra about the rate of return it requires represent a business choice on the part of Telstra in an environment where the Government has defined and mitigated investment risk. That this is a business strategy choice is evidenced by comments from Telstra that it plans to be a "premium provider charging premium prices".[3]

The rate of return for any builder/operator will necessarily be regulated because the network owner will not be subject to a competitive market (see below). The appropriateness of the regulated rate of return being demanded should be subject to the normal scrutiny of the ACCC. To this point, the CCC refers the expert taskforce to its separate submission, consisting of an analysis of Telstra's public statements about its required rate of return.[4]

Again, this narrower definition of the incentive question is addressed in the Australian context through the mechanism of the competitive bidding process that the Government has implemented (although the ability of the process to adequately resolve these questions remains unresolved, see below)

- *Having answered the First Question about when and why to build, what responsibility does the Government assume when it takes these catalyzing roles?*

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[3] Look Beyond Telstra to Avoid Broadband Price Hike http://www.zdnet.com.au/news/communications/soa/Look-beyond-Telstra-to-avoid-broadband-price-hike/0,130061791,339284333,00.htm

[4] The Telstra Return on a National FTTN Network, CIE June 2008

The transition to a fibre-based access network inevitably raises many regulatory and policy questions. In countries where private participants in the market have come forward proposing to build a deep fibre network, the onus is on those proponents to satisfy existing regulatory arrangements or make a case for novel or new arrangements to be put in place.

However, in Australia the Government has called for investment proposals and it must take the responsibility for clarifying the questions that must be resolved, and setting the standard and the means by which these questions will be resolved. Again, many of the questions are common around the world, but the Australian experience lends itself to particular resolutions.

The Government must take a leadership role at an early stage of the process of resolving these issues. Several of these issues are discussed below.

It is important that the Government act quickly to clarify what it will require of bidders because this guidance will have implications in many domains where bidders will have to make choices, many of which are interrelated. For example, guidance that the new network will be required to be structural separate could encourage bidders to build a network that is more amenable to competitive access. This could have cost implications.

In choosing not to provide guidance, the Government risks creating dilemmas for itself later. For example, how does it balance the attractiveness of a structurally separated network designed to allow many forms of competitive access and to provide deeper fibre against a proposal that is designed with limited competitive access opportunities but which is substantially cheaper to build as a result? How do bidders make choices about network designs that offset build cost against competition?

Is it realistic to expect more than one NBAN to be economic?

The transition to a deep fibre network challenges one of the underlying philosophy of telecommunications regulation – that the ultimate goal of regulation is to create facilities based competition.

This assumes that there will be more than one access connection to all end users. It is notable that this assumption does not underpin regulation of power, water and sewerage services. These industries are regulated under a schema that recognizes that there are some parts of the network – such as the distribution elements – that cannot economically be duplicated.

Nevertheless, much of the debate internationally has focused on opening access to ducts – whether those are telecommunications ducts or for the supply of another service such as sewerage, for example – on the assumption that multiple infrastructure owners give the best means of creating competition for end users.

While there is a robust debate in Europe about what regulation and technology could make possible facilities-based competition in an FTTH world, the OECD recently presented a sobering analysis of the business realities of such a proposition.

The OECD examined the costs of a FTTH rollout proposal in the Netherlands, based on modeling by the Dutch Ministry of Economic Affairs and separate commercial sector analysis, and concluded: “that there is not a lot of scope in the market place for multiple networks to roll out a new all-fibre infrastructure.”

> “If we assume a monopolist with a 100% market share (and no competition from hybrid-fibre networks), Table 2 shows the price per household in this model to be at EUR 57.66/month. When two networks roll out a network, without sharing costs, the average price for a subscription would have to be equal to the 50% marketshare subscription price of EUR 70.50/month. Adding more networks will decrease the average penetration rate and increase the average price per customer, if we assume all networks will make a profit. The increase in average price will also make it less likely people will subscribe and drive actual penetration rates down. Actual prices for a triple play offer over FTTH in the Netherlands currently range between EUR 45 and EUR 80.”[5]

These prices lead inevitably to one conclusion – the cost of building a NGAN is such that it is unreasonable to expect that a second network will be built once a first has begun. The likelihood of more than two networks ever being built is so remote that it can be disregarded as a possibility under present conditions.

In Australia, the contribution of public money in the NBN process puts beyond doubt that there will be only one national network. The public funding is available because it has been concluded that is not commercial to build one national network without a public contribution. This subsidised network can safely assume it will have no competitor.

There is, however, one set of circumstances where this rational economic thinking will may result in inefficient network duplication that is unsustainable – if there is an integrated incumbent that does not win the NBN bid and is not precluded from overbuilding. In those circumstances the rational response by the incumbent will be to repeat exactly what Telstra did when Optus began building a potential competitor to its copper network in the 1990s. It will duplicate the competitive investment until the competitor simply stops building. While this means that there might be competing networks in limited locations for a short time, ultimately one network owner almost certainly exit the market and the incumbent will most likely regain its monopoly. This is even more likely given the unparalleled control Telstra has over content. (see below).

This is not to say that public policy should not make provision for the building of competing networks at some time in the future through putting in place today appropriate access arrangements to passive network elements. Advances in technology in the future might reduce costs to the extent that this is possible, but the appropriate regulatory

[5] Developments in Fibre Technologies and Investment, OECD, 3 April 2008

approach on the basis of the commercial realities of today is to regard an NGAN as an enduring natural monopoly and regulate it appropriately.

It also suggests that the Government should place a strong emphasis on network topography to ensure that the bottleneck monopoly elements are as contained as possible. The OECD has suggested that, in this regard, special attention should be paid to the aggregation points in FTTx network designs. If possible, aggregation points that are further upstream should be preferred because this is more likely to create an economically viable point of interconnection for access seekers wishing to unbundle fibre access lines.[6]

Australian experience with the conduct of Telstra in the 1990s underlies the importance of taking an approach that does not encourage or allow wasteful overbuild for anti-competitive purposes, despite the fact that this might appear to depart from the principles of encouraging facilities-based competition. In the 1990s, Telstra was allowed to build an HFC network in direct response to the initiative of Optus to build the first HFC network. Telstra's management at that time did not disguise the fact that this was a response intended to foreclose emerging facilities-based competition. Further, Telstra was able to enter and leverage market power in horizontal markets by its half ownership of the dominant content provider, Foxtel.

This experience would be seen by advocates of unregulated markets as a good example of competition. However, the outcome has been failed competition and poor outcomes for consumers. The Optus network rollout was terminated, and a decade and a half later, Australia has not only one of the poorest penetration rates for cable TV, it also has none of the competitive tension between cable and telco broadband that has been credited with driving consumer uptake in Canada, the US and many parts of Europe such as The Netherlands.

The guiding principle of market regulation in Australia – the long term interests of end users test – recognizes implicitly that principles such as facilities-based competition are means to an ends, not ends in themselves. It is clear that the Pay TV experience in Australia has been a resounding failure against the LTIE test. Again, this should guide policy and regulatory principles in relation to the NBN process in Australia to regard the networks as a natural monopoly.

Regulating Monopoly – Learning From Experience

Australia's approach to the regulation of the bottleneck elements of the existing Telstra network has been to regulate access to the bottleneck elements and to provide remedies against anti-competitive conduct by Telstra.

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[6] Dr Taylor Reynolds, OECD, presentation to TellthetruthTelstra Seminar, June 5 2008. Fibre Investment Challenges and Opportunities.
http://www.tellthetruthtelstra.com.au/www/365/1001127/displayarticle/1003503.html

It is clear from the outcomes in terms of market disputation and consumer experience that these approaches have profoundly failed. Australia's experience in this mirrors that of the UK and New Zealand, both of which have in recent years concluded that access regulation alone is not enough and that structural remedies are necessary to deal with the problem of on going market power by their incumbent telecommunications companies.

There are many metrics that can be used to demonstrate the failure of competition to develop to the extent that it was expected and hoped. These include market share, shares of profits, relative speeds and penetration of broadband and geographically constrained services.

For the purposes of this report, consumer prices and industry disputation will suffice to demonstrate the failure of competition.

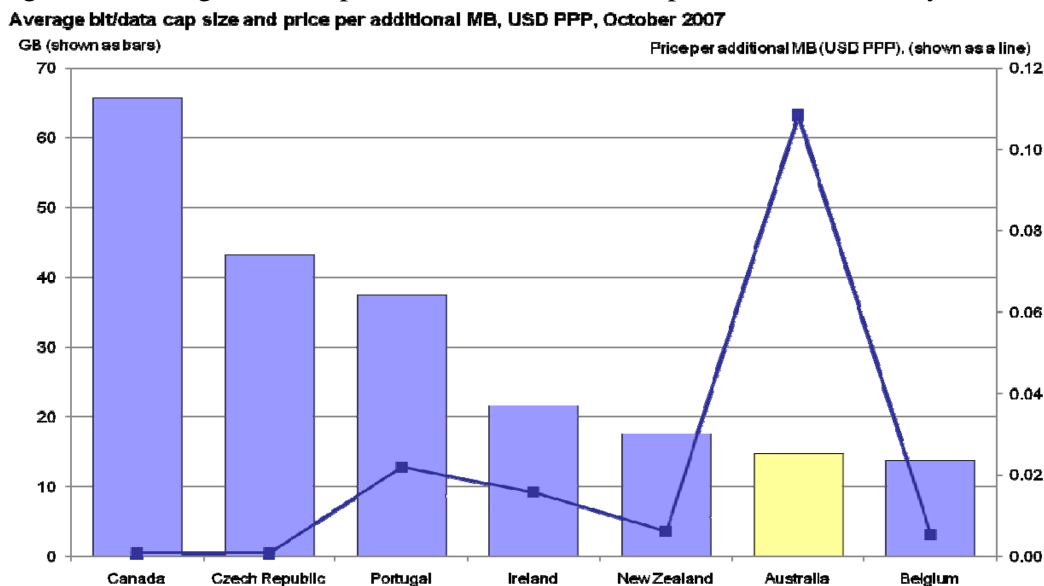
Again, data from the OECD demonstrates most persuasively the poor outcome for Australian consumers in terms of prices for services.

Figure 1 below shows the level of data caps in those countries where there is a download limit on consumer broadband plans and the price for data above those caps.

As can be seen from the bars, Australian consumers labor under the second lowest caps in the OECD. More troubling, however, is the "penalty" price Australian consumers pay when they go over these caps. It is five times more than the next highest.

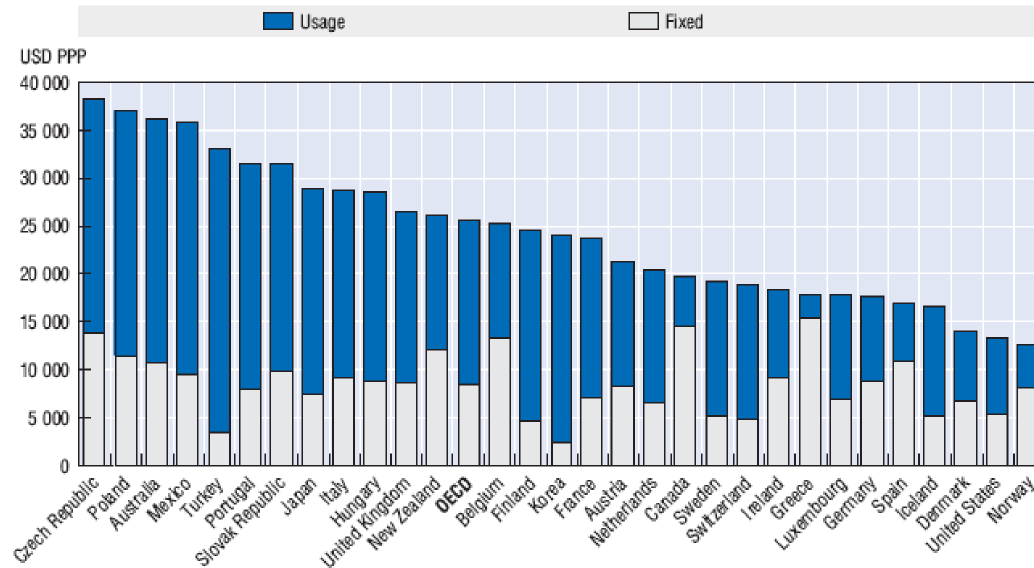
These two measures clearly demonstrate that Australian broadband users face serious price constraints to their usage of broadband services that are unique in the developed world.

Figure 1. Average Data Caps and Price of Above Cap Data: OECD Analysis



Figures 2 and 3 demonstrate that Australian business consumers also suffer higher prices for communications services relative to the rest of the OECD. Figure 2 shows that Australian SMEs pay the third highest prices in the OECD, more than 40 percent above the average. Australian SOHOs also pay the third highest price in the developed world, more than 35% above the average.

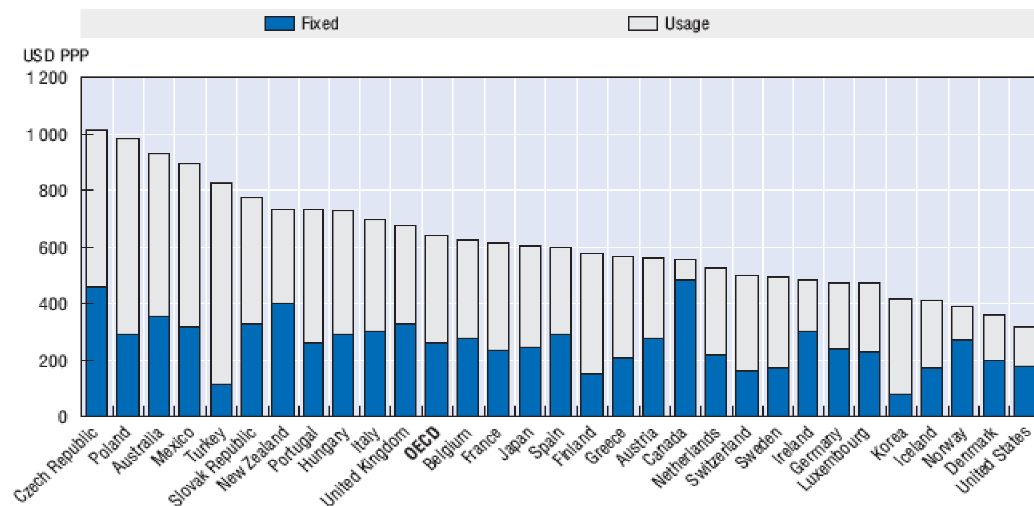
Figure 2. OECD Analysis of fixed line basket for SMEs.



Note: Discounts, if available, are subtracted from the usage charges.

StatLink http://dx.doi.org/10.1787/002258166760

Figure 3. OECD Analysis of fixed line basket for SOHOs.



Note: Discounts, if available, are subtracted from the usage charges.

StatLink http://dx.doi.org/10.1787/002234233571

Separate OECD analysis over many years and in relation to many services has consistently found that those countries with the most robust competition have the lowest prices and earliest rollout of services. Those with the weakest competition, conversely, have the poorest outcomes for consumers.

In relation to industry disputation, the experience in Australia has been completely contrary to what was expected when competition was first introduced in 1997. At that time, it was expected that the regulatory tools provided by the Parliament would over time encourage an increased use of commercial negotiation and less reliance on the intervention of the regulator to resolve disputes. This was intended to lead to the development of a more certain climate for investment.

The experience has been the opposite. As of the first quarter of 2008, there were a record number of disputes before the ACCC and the courts, numbering more than 40. Prices for services as basic as the Unconditioned Local Loop had been in dispute for up to seven years, with Telstra refusing to accept prices determined by the ACCC until it had exhausted all legal avenues to challenge the authority and decisions of the Commission.

These developments, however, cannot be said to be surprising. The ACCC examined the problems besetting competition in the telecommunications industry as far back as 2003.[7] The Commission concluded that the fundamental problem was that the integrated structure of Telstra – combining ownership and control of the ubiquitous access network with ownership of retail businesses – meant that it had both the ability and the incentive to discriminate against access seekers to disadvantage them in downstream markets. This is exactly the conclusion that has led to structural reform in the UK and New Zealand.

However, the situation in Australia is far worse from a competitive standpoint than in any other developed market. In 2003, the ACCC concluded that the level of integration of Telstra was unique in that it combined the vertical telecommunications businesses with ownership of the dominant cable TV network, half ownership of the dominant Pay TV content provider and ownership of the largest mobile network.

With the problem identified in 2003, it might have been expected that measures would be taken to resolve it.

However, the problem of increasing horizontal integration and the incentive for Telstra to leverage market power across horizontal markets has meant the market problems have only become worse in recent years. For example, Telstra has continued to pursue deals to secure exclusive content across platforms and used this to disadvantage competitors that do not and cannot match Telstra's ubiquity.

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[7] Emerging Market Structures in the Telecommunications Sector. June 2003. http://www.accc.gov.au/content/item.phtml?itemId=337611&nodeId=bd7602ed351dadd8c069b69436b45231&fn=Emerging%20structures%20in%20the%20communications%20sector%20(Jun%202003).pdf

The chairman of the ACCC, Graeme Samuel, pointed to this problem in 2005 in the following terms.

> "(A) key function of the ACCC is developing, *to the best extent possible under the existing industry structure*, a truly competitive environment in all aspects of telecommunications. To this end, the ACCC has regulatory powers specific to telecommunications, set out in Parts XIB and XIC of the Trade Practices Act.
>
> These provisions exist because it is recognised that the networks over which telecommunications services are currently provided, and which in future may well be the conduit for a whole array of media services, often have bottleneck characteristics which differentiate these markets from the more traditional media. In this respect, it's absolutely crucial that existing network owners not be allowed to use their market power to close down new forms of competition. This could happen either through the roll out of new technologies and networks being impeded or through existing network owners obtaining exclusive control of the content that could be offered on the new networks." (Italics added)[8]

Mr Samuel went on to discuss the potential for the Commission to use Sections 45 and 47 of the Trade Practices Act (relating to exclusive dealing and substantial lessening of competition) but pointed out that the use of these provisions had limits. The fact that the Commission has never, to the CCC knowledge, sought to use either of these provisions suggests that it does not believe it can prove a breach and stop what it has identified as a problem for the development of effective competition.

Further, Telstra has recently been comfortable enough that it will not face sanction for its use of horizontal market power that it has taken to boasting of its unique control of the market. A recent example of this were reported comments from BigPond managing director Justin Milne in Cannes where he boasted that Telstra was able to bring together content and delivery platforms that no one else was able to match, thanks in part to Telstra's exclusive content arrangements.[9]

This would appear to be exactly the type of conduct that Mr Samuel warned against as being potentially harmful to competition, yet Telstra has continued to execute a business strategy built on extending and leveraging this market power.

The experience of the past five years has demonstrated that the present arrangements are unable to contain the continued expansion of Telstra market power. The fundamental weakness that has been exposed is that a regime that is based on managing behaviour in

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[8] Graeme Samuel, ACMA Annual Conference 10 November 2005. http://www.accc.gov.au/content/item.phtml?itemId=713959&nodeId=46345e11cff0892258d2bacf451cbca3&fn=20051110%20ACMA.pdf

[9] http://www.itwire.com/content/view/18785/1095/1/0/ For BigPond Read BigBrother, ITWire, 16 June 2008

order to prevent a business from responding to its fundamental incentives is doomed to fail. An integrated network owner/retailer will continue to push the limits of conduct in order to find a means to advantage itself and disadvantage competitors. Only by changing the incentives so that the network owner views downstream market participants not as competitors but as customers can this vertical anti-competitive conduct be effectively prevented.

The previous Federal Government recognized the failure of the access regime, as evidenced by its attempt to respond with a set of operational separation arrangements. However, the version of operational separation negotiated between the Department of Communications and Telstra failed to put in place any arrangement to address the problem of Telstra's incentive to discriminate against competitors, nor any effective remedy if it breached the provisions of the so-called operational separation regime, introduced from 2005.

The previous Minister has recently acknowledged that a stronger separation regime should have been introduced[10] and ACCC has recently confirmed that the arrangements have failed.[11]

The present Minister, as Opposition Communications spokesman and in recent speeches since becoming Minister, has indicated his commitment to structural reform and his view that the arrangements introduced in 2005 were inadequate.[12]

<u>The experience of the past serves as clear warning that allowing the Australian NBN to be built by an integrated entity regulated through access arrangements will create a situation where the serial abuse of market power would be inevitable.</u>

It is clear, therefore, that structural arrangements must be a pre-requisite for any future network. Further, the architecture of an NGAN means that the arrangements that have been put in place in the UK and New Zealand would fall short of what is now needed in Australia (see below). It must also be remembered that the functional separation arrangements in both of those countries were put in place after the prospect of full structural separation was invoked. The functional separation alternative was agreed to because it was seen as a quickly and something that could avoid the potential for legal conflict.

These countries, however, did not have the rare opportunity that Australia has. They were dealing with an existing network with established ownership and retrofitting separation arrangements. Australia is dealing with a new network with ownership arrangements that are not yet in place, but which the Government has acted to bring into being.

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[10] Communications Day, May 13 2008

[11] Senate Economics Committee Estimates Hearing
http://www.aph.gov.au/hansard/senate/commttee/S10864.pdf

[12] Senator Stephen Conroy. Speech to CommsDay Summit April 16 2008.

The opportunity to create separate ownership cleanly, quickly and from the start will not be repeated. Further, as discussed below, functional or operational separations arrangements used in other jurisdictions would be an inadequate remedy because of the nature of the proposed new network.

Why Not Separate?

In the face of the experience of the conduct of the integrated Telstra and its overseas peers and the near universal support for structural separation, the onus must be on Telstra and its supporters to demonstrate why separation should not be pursued.

The arguments against separation presented by Telstra in recent public presentations do not bear on the public policy but refer to the impacts on Telstra's management and shareholders. There have been some economic papers presented on Telstra's behalf in the past, but it is notable that they are completely lacking in any attempt to quantify the benefits of integration.[13]

As discussed, the onus must be on Telstra to prove that there is a public benefit in allowing to continuation of arrangements that clearly are of financial benefit to that business. Former ACCC chairman Prof Alan Fels has succinctly described the test that policy makers should apply:

> Every business person has an interest in avoiding competition and acquiring monopoly power. That's not dishonourable – if it's not illegal – because the job is to make money for their firm. What's dishonest is claiming their monopoly power is good for the public.[14]

One recurring theme in Telstra criticism of separation proposals is that it would be harmful to investment. Telstra has repeatedly cited BT in making this argument, although without specifying any evidence to support this contention. BT has repeatedly rejected claims that its functional separation arrangements have deterred investment.[15] Further, Dr Chris Doyle argues that there was little compelling evidence on the investment issue but that a number of academics had found that separation did not appear to harm investment. Dr Doyle went on to say:

> "While coordination may confer benefits within an integrated vertical structure, these are likely to be offset by the economic costs associated with anticompetitive conduct arising from non-discriminatory practices."[16]

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[13] Havyatt Assoc Submission to ACCC Draft Decision on FANOC Undertaking December 2007
[14] Prof Alan Fels Address to the National Press Club June 30 2003
[15] Functional Separation in the UK, Karen Northey, head of Regulatory & Government Affairs, Asia Pacific, Middle East and Africa, BT. June 2008
[16] Structural Separation and Investment in the National Broadband Network environment, Dr Chris Doyle

NGAN Architecture; Implications for Regulation

The philosophy that underpinned the functional separation arrangements in the UK was that there were physical elements of the access network that were an enduring bottleneck, and separation measures could be effectively focused on those elements.

Specifically, the local loop from the exchange was identified as the bottleneck point.

This is consistent with the existing network architecture in most of Australia today, <u>but becomes irrelevant when the exchange is bypassed by fibre that runs either to the curb/cabinet/node or to the premises.</u>

Further, as discussed above, there are network topography options that have direct implications for the type of competition that can be utilized on the network. A structurally separated network owner with appropriate incentives to encourage the maximum utilization of its asset will wish to encourage competitors to use the network. This interest will influence the architecture of the network it proposes to build.

A network owner with the incentives to which Telstra presently responds will be motivated to design a network that minimizes the ability for competitive access.

The bottleneck elements of a deep fibre access network will vary widely under different network architectures, but all make access to copper at the local exchange obsolete. The models of functional separation implemented in the UK and New Zealand are therefore no longer relevant in the Australian context. The "three part" functional separation models used in those countries are, in effect, compromise arrangements put in place to promote competition on a copper-based network that will soon no longer exist in Australia.

Because of the wide variations in possible architectures that respondents to the RFP will be required to consider, aligning incentives with competition policy objectives at the earliest possible stage is critical to the long term interests of the Australian community. Aligning these incentives will clearly require structural separation to avoid the persistent regulatory failure of the past, as discussed above. Therefore, bidders should be given this signal firmly and quickly before they lock in inappropriate network designs.

Post-Copper Networks and Boundary Issues

Given the wide variation of network designs possible, and the inappropriateness of models designed to apply to a copper-based access network architecture, the CCC submits that the "line" of separation should defined retail businesses and require separate ownership and control. The approach of working upstream from the end user to the physical point at which the bottleneck begins, as has been done with functional separation in the UK, cannot be applied in a FTTx environment.

Discussion in recent years have often been drawn to the three part (network, wholesale, retail) model that has been applied in the UK. But this model was a compromise intended to specifically address problems of access to the unbundled local loop that had slowed broadband development in the UK. In the past, discussions about structural separation tended to focus on the division between wholesale and retail businesses. This was because such a boundary directly addressed the incentive to discriminate problem.

The CCC submits that this incentive issue is the core problem in any integrated NGAN, just as it is in a copper-based network. Further, defining retail activity as the boundary point should allow for any proposed NGAN architecture to be captured within the definitions, avoiding the complication of trying to define what boundaries would apply in FTTH, FTTN or some other configuration.
This position is also proposed by Dr Chris Doyle of Warwick University in a recent paper on separation issues in Australia. Doyle writes:

> The form of structural separation considered most appropriate in the context of the NBN is along the lines of the NetCo model, where the wholesale network elements are separated from the downstream retail functions. The NetCo model is better suited for the NGN and NGAN environment, as there is less need to worry about identifying the boundary between 'access' and 'non-access' elements. As the boundary between access and non-access elements is likely to vary over time, determining a point of separation at one moment and forming a LoopCo carries additional risks. It is also likely that the channelling of market information for investment purposes between retail and network components will be easier in the NetCo model than in the LoopCo model.[17]

However, as discussed above, it is desirable to further separate the ownership and control of the passive infrastructure, such as ducts and access points, in addition to the separation of wholesale and retail activities. This has been adopted in Singapore in the NBN bidding process there.

This additional point of separation allows for later wholesale market entry if there is a point in the future if and when the cost of entry makes this form of competition viable. Further, the threat of entry might add some pricing discipline to the monopoly network wholesale services provider, who would otherwise be constrained solely by regulatory action on price.

Duct access, however, is not sufficient on its own. As has been pointed out by BT, duct access creates the possibility of entry for only a very small number of alternative suppliers at best. Even if it is available, the questions about how to ensure equivalence of access remain in the absence of parallel separation arrangements for the ducts and the wholesale businesses supplying services from them[18]. It is best seen as complementary and a safeguard underpinning separation of retail activities from the wholesale business of the network owner.

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[17] Doyle Op cit
[18] Northey, op cit

Incentives, Product Development and Price Setting Methodology

As discussed above, creating the appropriate incentives on the network owner/wholesaler is necessary to finally resolve the anti-competitive issues that have bedeviled the telecommunications industry in Australia, and to ensure that the topography of any proposed new network is not designed with anti-competitive purposes in mind.

Appropriate incentives will also address the other issues that likely to cause a problem in some of the other crucial business design and process decisions that must be made by NBN proponents.

For example, the process to identify and develop responses to new product opportunities requires engagement with retail customers. However, the experience of competitors with Telstra to date has been most unsatisfactory in this regard.

Telstra develops products for its own retail businesses without contacting other retailers, and has recently even released products to the retail market before having any engagement with wholesale customers. This conduct has been the cause of complaints by competitors to the ACCC but Telstra continues with the behaviour even in the face of operational separation rules intended to stop it. This is a clear example of incentives overriding regulatory behavioral rules.

Clearly, the only way to ensure that the network owner does not systematically discriminate against some retailers to the benefit of its own retail business is to ensure that it has an incentive to treat all with equal regard. This, again, can only be achieved with certainty through structural separation.

Price setting methodology is more complicated but is a crucial element of public policy to be resolved before the NBN is built.

Structural separation alone does not guarantee that the prices set by the wholesale are not inflated. Retailers faced with inflated wholesale prices will have a motivation to have them reduced because they will wish to prevent the wholesaler misusing its market power to shift margins from the retail market to the wholesale business.

However, the pressing concerns of today for retailers are that one retailer – Telstra – enjoys significant and anti-competitive costs structures because it does not acquire the access to the network for which others must pay.

This concern should be removed by structural separation and there is therefore a risk that without the persistent and determined advocacy of retail competitors, there would be a drawn out debate between the regulator and the wholesaler that would delay appropriate pricing for end users.

The greenfields nature of an NBN build, however, creates an opportunity for this regulatory quagmire to be avoided. Actual build costs would be known and could be agreed between the regulator and the wholesaler in advance. Access prices would then be based on actual costs of build and established regulated rates of return.

There is established regulatory practice that can be applied in this instance reflecting the above in the National Gas Access Code.[19] This sets out the arrangements for establishing access prices to new facilities investments. The access prices are established by agreeing the value of the investment, based on cost, and the regulated rate of return for existing investments. Access prices reflect those two elements.

Reliance on theoretical network cost modeling to establish access prices to a new facility should be avoided. There is a long and inglorious history of debate surrounding cost modeling by Telstra that has simply served to demonstrate the inadequacies of this approach.

To the extent that existing assets are utilized in the NBN, these should be transferred at an agreed value to the structurally separated NBN owner. Again, the Gas Code provides a methodology whereby these could be value consistent with established regulatory practice.

NBN Access Product Definitions and Development

The issue of product development arrangements and the involvement of alternative retailers is an issue that assumes a high priority in the NBN process. Simply putting in place incentives to ensure the appropriate behaviour in future will not be adequate because the process of having competing NBN proposals for the right to build the national network means that bidders must develop basic access products as part of their bids.

Even with the best will in the world, proponents are unlikely to be able to fully anticipate the needs of all industry participants without being able to directly negotiate with them. Telstra, based on its history of antagonism to competition, is unlikely to be well motivated.

There is a tension between the need for bidders to have a clear understanding of the requirements of all access customers and the desire of the Department, in particular, to strictly limit communication between industry participants. The CCC, as discussed below, believes the Department is responding to this tension by creating an excessively secretive environment that will ultimately harm the process.

It must be remembered that there are some elements of the NBN project that are unique. Not least of these is that all fixed line industry participants will be customers of the winning bidder. This means that even those who bid and lose will be forced to buy services from the winning bidder.

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[19] National Third Party Access Code for Natural Gas Pipeline Systems.

Industry participants who are given no insight into the proposals of bidders will inevitably and legitimately become increasingly tense about whether they be forced to completely change their business plans at short notice, with no opportunity to influence the rollout plans and access products that they will be forced to live with.

The CCC fully supports the Government's stated requirement that the wholesale access products provided by the new network owner allow maximum product and prices differentiation, and to allow them to deliver emerging services. But only wide industry consultation can identify what that will require of bidders. Will, for example, all industry participants be able to develop IPTV services based on the access products available? How will they be given comfort of this if they cannot see technical specifications for themselves before a preferred bid is selected?

On the other hand, the experience in The Netherlands where incumbent KPN is presently involved in both FTTC and FTTH rollouts demonstrates that it is entirely possible for transition measures to be put in place that limit disruption to access seekers, and develop products that allow access seekers to continue to have viable business options. But this requires deep engagement with access seekers and am appreciation of their needs.

KPN's FTTC transition arrangements offer access seekers options to remain in some capacity in existing exchanges, or to move their equipment to cabinets/nodes from the exchange to take sub loops, or to take alternative access products. KPN offers financial compensation arrangements for those "unbundlers" who choose to move from the exchange to take a wholesale access service. Most importantly, the access service to which they migrate is designed to allow them the maximum flexibility possible. It was described by KPN Chief Regulatory Officer at a Canberra seminar this year in the following terms:

> "Now what is exactly this service wholesale broadband access? That's basically a V-line between the platform and an end user. So it's a virtual pipeline that we offer. So if a wholesale customer wants to make use of this virtual pipeline he can determine, you know, the capacity and the quality of service, the redundancy, etc. So it's more or less, what a wholesale customer can do with it is more or less the same as what he can do if he is buying an unbundled line from us."[20]

Mr van den Burkel said that it was KPN's view that access seekers would conclude for themselves that the best long term arrangement was for them to take the "virtual pipeline" product which would allow the transition to be completed, but that KPN was not going to force them into the action.

The technical arrangements that allow this level of flexibility clearly need to be well understood. Consistent with the Government's desire to maximize competitive differentiation, the CCC submits that the expert panel must independent establish the technical minimum standards that it believes all bidders must meet, and that these

[20] Jilles van den Burkel, Chief Regulatory Officer, KPN. Presentation Canberra June 5 2008.

standards should be made public. This will require investigation of the products available today in Australia and other countries, including The Netherlands. This might have implications for network design and should therefore be a priority. Also, it is important that a consistent definition of bitstream, reflecting the definition used by KPN, is applied by all bidders.

Process failure risks

The commercial aspects of the NBN process have attracted much attention. However, the CCC submits that the implications for the public policy and regulation surrounding communications are more important. For the reasons discussed above, the decisions made in this process will shape the industry and consumer outcomes for a generation. The process will require the most fundamental changes in the policy and regulatory environment in the 11 years since competition reforms were introduced.

The CCC submits that the Department has become too focus on commercial issues and has lost sight of the need for decisions to be made in ways that are consistent with past and best practice processes for the development of policy and regulation. The proposed arrangements must be scrutinized publicly and open for examination.

It is crucial that no one loses sight of what is happening in this process. The proponent who ultimately builds the NBN will be sanctioned to own and possibly operate a monopoly on terms that might breach the provisions of the Trade Practices Act. And not just any monopoly. This is a monopoly that 98 percent of Australia will have no choice but to buy communications from.

This cannot happen under the existing laws in Australia without the opportunity for public input. Under the law of the land today, no proposed investment that seeks, through an undertaking to the ACCC, what is in effect a license to operate a monopoly on terms protected from the full force of the TPA would ever be negotiated in private. The NBN process has been initiated because Telstra refused to participate in the existing special access undertaking process because it did not want public scrutiny. The interests of Australian citizens must not be made secondary to Telstra’s corporate ambitions.

Yet the Department has consistently placed its concerns about the commercial aspects of the NBN process above the need to ensure public scrutiny and input into decision-making around the regulatory issues.

This is not a minor matter in the view of the CCC. The responsibilities attaching to public officials engaged in these types of decisions was well summarized by Prof Alan Fels in 2003 in discussing the powers of the ACCC.

> The power to authorize is an extremely important one. If two firms seek to merge, it is the power of licensing a monopoly in perpetuity.[21]

[21] Fels Op Cit

Public processes around the making of these decisions have developed because it is recognized that a primary duty of the Government to protect the interest of citizens when faced with investment plans by private companies.

It would be a dangerous, if not abhorrent, precedent if this process were to jettison the past arrangements to facilitate public scrutiny of proposals simply because of the availability of Government financial support for part of a proposed monopoly piece of infrastructure. Especially as that new infrastructure will overbuild and replace existing network over which those public scrutiny processes do apply.

Already there is a widespread view in the industry that the Department has created a process that is incapable of resulting in fully informed decision because of the constraints it has placed around its willingness to allow information to be provide directly to decision-makers. The Minister explicitly asked for submissions from all interested parties as a demonstration of his desire for a fully informed decision-making process, and noted that this is a completely separate process to the RFP to proponents. There cannot therefore be any constraint on respondents to the RFP in responding to the regulatory submissions request.

However, the Department appears to have given some participants in the RFP processes the impression that they are constrained in what they can provide by way of response to the call for regulatory submissions. This raises serious risks of legal challenge.

Given that, as described above, the business futures of every fixed line communications company in Australia is likely to be affected by this new network build, it must be assumed that the likelihood of legal challenges against any decision are high. That likelihood only increases as stakeholders' confidence that the Department is running a properly open and transparent process decreases.

The difficulties encountered in the Opel network exercise, both before and after the election and change of Government, should serve as a warning against excessive secrecy in the process, the exclusion of regulatory agencies, the unwillingness to engage the broader industry on crucial issues such as wholesale access arrangements, and the failure to properly inform the industry of what stages the process had reached. All of these factors in the Opel case contributed to wide dissatisfaction among the industry which went well beyond the much published legal actions by Telstra. Some of these issues, such as the failure of the Department to follow up its promise of consultation with stakeholders on wholesale arrangements, would have become a serious cause of conflict if the contract had gone forward.

Given the greater reach of the NBN network proposals, it could be expected that the readiness to take legal action in the NBN process will be much higher than the Opel decision.

The decision about who builds, owns and operates the NBN will be defining the future for all companies in the industry. There is little confidence in the industry that the

Department has an adequate understanding of the needs and motivations of non-Telstra businesses, based on years of unsatisfactory policy advice.

An example of this that remains fresh in the minds of the competitive industry was the development of the operational separation amendments in 2005. Warnings, both public and private, by the non-Telstra industry that the proposed arrangements would fail completely were ignored by the Department. These warnings have subsequently been completely vindicated.[22]

Conclusion

From the above discussion, the CCC hopes that it is clear that the implications of the decisions the the expert panel and the Government will make in the next 12 months are extensive and not all immediately evident. In many cases, acts of commission and omission by decision-makers along the way will have consequences that go well beyond what might be immediately apparent.

The CCC seeks an opportunity to meet with the panel to emphasise and discuss several points that it believes have not been adequately discussed in the public debate between Telstra and others to date. These include: the issue of the separation "boundaries" that are appropriate in a future, deep fibre network; the incentive debate and the importance of understanding the impact on this incentive issue of the Government's actions since its election, and; the transitional arrangements, alternative products and need for engagement with broader industry needed to ensure that disruption to the industry from the deployment of a new access network is minimized, for the protection of the interests of both the industry and consumers.

The CCC will make itself available to the panel at the time and place of its convenience.

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[22] ACCC evidence to Senate Economics Committee, June 5 2008