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1. Introduction

1.1 Background

Infrastructure Partnerships Australia (IPA) is committed to the reform of the Australian telecommunications market to promote the efficient use of existing and planned infrastructure as well as the development of appropriate market structures to promote competition and value for money services for consumers and businesses.

IPA has previously submitted to and provided verbal evidence to the Senate Select Committee on the National Broadband Network (NBN) in support of reform to the established domestic telecommunications market to create a vertically separated wholesale service provider for fixed line services. IPA's previous submissions to the Committee include:

- [Submission to the Senate Select Committee on the National Broadband Network - July 2009](#)
- [Submission to the Senate Select Committee on the National Broadband Network – August 2008](#)

1.2 About Infrastructure Partnerships Australia

Infrastructure Partnerships Australia is the nation's peak infrastructure body. Our mission is to advocate the best solutions to Australia's infrastructure challenges, equipping the nation with the assets and services we need to secure enduring and strong economic growth and importantly, to meet national social objectives.

Infrastructure is about more than balance sheets and building sites. Infrastructure is the key to how Australia does business, how we meet the needs of a prosperous economy and growing population and how we sustain a cohesive and inclusive society.

Infrastructure Partnerships Australia seeks to ensure governments have the maximum choice of options to procure key infrastructure. We believe that the use of public or private finance should be assessed on a case-by-case basis. IPA also recognises the enhanced innovation and cost discipline that private sector project management and finance can deliver, especially with large and complex projects.

Our Membership is comprised of the most senior industry leaders across the spectrum of the infrastructure sector, including financiers, constructors, operators and advisors. Importantly, a significant portion of our Membership is comprised of government agencies.

Infrastructure Partnerships Australia draws together the public and private sectors in a genuine partnership to debate the policies and priority projects that will build Australia for the challenges ahead.



The Australian Telecommunications Market

Image Source: Bidgee

2. The Australian Telecommunications Market

The introduction of the National Broadband Network (NBN) offers a generational revolution for Australia's telecommunications. The scheme will establish Australia as a world leader in the provision of very fast broadband services and provide the platform for the development of new industries based on innovative technological applications.

A National Broadband Network (NBN) offering a 100 megabits per second fibre-to-the-premises (FTTP) network to 90 per cent of the population, with remaining regions serviced by 12 megabit per second wireless technology, will provide a substantial step-change from current network speeds, which average 1.5 megabits per second for DSL and 9.9 megabits per second for cable during 2007¹.

The introduction of the NBN is a fundamental shift in the Australian telecommunications industry and makes broader reform of the market timely and critical for the maximisation of value of existing infrastructure. The development of the NBN must therefore lead to a rethink of the future use of the existing copper-based fixed line network – including the promotion of innovation and value-for-money service offerings to promote the efficient use of this network.

IPA supports competitive and contestable infrastructure service provision across all asset classes. The development of the NBN and the proposed introduction of a vertically separated industry structure is a welcome feature of the NBN; as are steps to support a fair and open marketplace for existing telecommunications services. The long lead times for the establishment of the NBN, up to eight years for the conclusion of construction, emphasises the importance of short-term reform to promote competition in the existing, pre-NBN telecommunications market.

Beyond the short-term benefits of competition, reform of the regulatory arrangements for the established, copper network to promote an independent wholesale infrastructure operator will be critical to ensuring the right incentives exist for the optimal use of both the copper network and the NBN on an ongoing basis.

Over the past decade the development of high-speed broadband services has become a major focus for governments throughout the world. While the development of nation-wide next generation broadband infrastructure represents a major investment – the US Federal Communications Commission Taskforce recently received expert advice suggesting a national broadband scheme could cost up to \$350 billion² - the benefit that can be derived from investment in internet and telecommunications infrastructure, through economic productivity uplift, is widely accepted and has been demonstrated by various technologies, in various countries.

For instance in Australia, a recent paper examining the link between telecommunications and economic productivity by Concept Economics researcher, Dr. Paul Paterson, examined the link between growth in mobile broadband through the 3G network and economic growth. Dr Paterson found that based on the current of mobile broadband growth, the economy benefits from additional

¹ OECD (2009) 'OECD Broadband Statistics 2009'

http://www.oecd.org/document/54/0,3343,en_2649_34225_38690102_1_1_1_1,00.html last visited 10 July 2009

² Poirier, John (2009) 'U.S. May Need as Much as \$350 billion to Extend Broadband', Reuters,

<http://www.reuters.com/article/technologyNews/idUSTRE58S4WM20090929> last visited 6 October 2009

productivity of \$7.4 billion annually. This translates into an average of \$250 for each Australian household³.

Similarly, work undertaken by Accenture during 2003 notes that next-generation broadband will join previous innovations that sparked long periods of economic growth. Over the next five to seven years, this technology has the potential to contribute \$300 billion to \$400 billion a year to European GDP and \$500 billion to US GDP⁴.

³ Concept Economics (2009) Next G Productivity Study,
http://conceptnews.com.au/artman2/uploads/1/Next_G_Productivity_Impact_Study_FINAL_130209.pdf last visited 7 July 2009

⁴ Accenture (2003) 'Igniting the Next Broadband Revolution',
http://www.accenture.com/Global/Research_and_Insights/Outlook/By_Alphabet/SummaryRevolution.htm



Reform to the Telecommunications Market

Image Source: Lewis Collard

3. Reform of the Telecommunications Market

While competition in some segments of the market is encouraging, on the whole competition has not developed as quickly as would have been anticipated with the telecommunications reform in 1997. Addressing the current underlying structural issues of the industry will assist in improving competition, with subsequent flow on benefits to consumers and business.

-Ed Willett, ACCC Commissioner, Competition Regulation in a Changing Environment, 11 June 2009

3.1 Existing Market Structure

The telecommunications reforms of the 1990s have been critical to the development of a competitive private telecommunications market in Australia. In a period of less than two decades Australia has moved from a publicly owned monopoly provider of telecommunications to a market supporting multiple fixed line retailers and a dynamic marketplace for mobile and internet service providers.

This active period of reform of the telecommunications sector saw the merging of OTC and Telecom to form Telstra, the deregulation of the marketplace to promote new entrants and the privatisation of AUSSAT (to form Optus) and Telstra.

The reforms of the 1990s were successful in the promotion of a new provider of fixed line services, Optus, and two new market entrants in the mobile marketplace, Vodafone and Optus. The restructure of the markets, including the maintenance of Telstra's role as the vertically integrated service provider, assisted to deliver relative market stability during a period of regulatory instability.

The legacy of the structure of these reforms has been a slowing rate of reform, as well as increasing anti-competitive pricing practices and gaming by a dominant market participant. Despite the intention of the current regulatory regime, it is broadly accepted that the current market structure has faced challenges in ensuring a robust, competitive market between the vertically integrated, operationally separated Telstra and other market participants.

This current lack of competition occurs in spite of the operational separation between the retail, wholesale and network divisions of the incumbent, inferring the need for a more clearly defined division between the operations of the wholesale and retail network operators. The existing operational separation has not been able to preclude Telstra from discriminating in favour of its own retail activities over those of its wholesale customers (other retailers).

3.2 The Need for Reform

Vertically and horizontally, Telstra is one of the most highly integrated telecommunications businesses in the world. This level of integration creates perverse incentives for the organization to limit innovation and cost competitiveness within the marketplace.

The current market structure undermines retail competition in a way the current regulatory framework cannot control. Vertically integrated Telstra can refuse to sell services to their retail competitors; or can provide higher performance standards to its retail customers. This disadvantages wholesale customers by squeezing retail-wholesale prices and limiting service quality.

While these actions could be seen as rational attempts to protect market share, a market structure which allows for these practices is clearly not able to deliver sufficient competitive tension. The national interest is best served through competition in the telecommunications sector.

Telstra has also been able to block market entry of innovative technologies that threaten its business. Despite market readiness of new technology, Telstra delayed the full introduction of innovations, such as ADSL 2+, in order to limit costs. Other companies were left to innovate while Telstra stifled competition by wholesaling access at rates so high that competitors could not make a return relative to Telstra's retail price.

In addition, uncertain conditions and obstacles to effective competition in the Australian telecommunications market have significantly inhibited investment in physical infrastructure by access seekers, resulting in little infrastructure-based competition at a retail level.

Limited self-regulatory mechanisms and unduly complex processes in the existing regulatory framework have led to widely held concerns that Telstra leverages its market power, derived from control of the physical network infrastructure, to limit competition and consumer choice.

The current regulatory and policy framework has not facilitated the optimal level of competition between retail service providers in the telecommunications market. The current regulatory regime has failed to deliver world-class standards on price, quality, availability and variety of services. Consequently, the current regulatory regime should be considered to have not succeeded in fully delivering the desired outcomes of the 1990s reform programme⁵:

- world class infrastructure using the latest market driven technology;
- a large number of service providers (including carriers) offering diverse and innovative services; and
- contestable market strategies which reduce prices and increase the quality of services.

The natural monopoly characteristics of the network - the scale of investment required to duplicate the existing copper network - which connects almost every house and business in the country has hampered the advancement of best-practice and new infrastructure investment within the Australian telecommunications sector. While many of these concerns could potentially be overcome through the introduction of the vertically separated NBN, reform of the regulatory arrangements for the existing copper network must continue.

The objective of such reform must be the achievement of the most efficient use of infrastructure to promote national productivity; and must commence immediately - in advance of the NBN's rollout.

Two critical factors emphasize the importance of reforms to the established network over the short-term: the significant development time periods prior to the rollout of the NBN and the potential for established customers to continue to access services through the copper line network following the rollout of very fast broadband infrastructure.

⁵ Shogren, Rod (1997) 'Telecommunications Reform - Will it Work?', Australian Competition and Consumer Commission, Australian Interactive Multimedia Industry Association Conference, Conrad Jupiters Hotel, Gold Coast, 1 August 1997

3.3 Guiding Principles for Telecommunications Market Regulation

With the imminent roll-out of the NBN, and the commitment from the Government to implement the Network through a model of structural separation of wholesale and retail businesses, the Government has a timely opportunity to adopt a new approach to regulation in the market for existing telecommunications services. There is wide industry and community support of moves to promote a strong, independent wholesale service provider, including from the government's own industry regulator, the Australian Competition and Consumer Commission (ACCC). The ACCC's Graeme Samuel has said:

*"A vertically separated ownership model could reduce incentives for the access provider to discriminate between downstream users of the access service and, therefore, facilitate strong and effective competition between access seekers in retail markets."*⁶

IPA supports the Commonwealth Government's proposed strategy for the reform of the Australian telecommunications industry, including specifically the separation of Telstra, through the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009*. The provision of sufficient flexibility to allow Telstra to select its own path to functional separation, accompanied by appropriate penalties if it fails to do so, is an appropriate course of action for Government.

While recognising the significance of legislated structural separation, the use of such a mechanism to support increased competition – with all the benefits it promotes – is appropriate for the telecommunications sector at this time. The legacy of Telstra's public sector origins and the lasting monopoly of the copper-based network are critical factors in the infrastructure industries contingent support for this strategy.

During 2003, the Organisation for Economic Cooperation and Development (OECD) undertook a review of the benefits and costs of structural separation. The review concluded the main benefits of structural separation in the telecommunications industry include⁷:

- promotion of entry and innovation into the competitive market with consumers benefiting from competition in the provision of services such as local telephone services and high speed Internet;
- creation of a 'level playing field' by forcing the incumbent's wholesale arm to deal with its retail arm on the same terms that it deals with any other competitor;
- allowing regulators to focus on the wholesale network to guarantee service quality, network reliability, and access to essential network facilities at cost-based prices;
- relative simplicity when compared to behavioural remedies. It is effective as it targets the very reason for the incumbent's impact on competition within the market; that is, its

⁶ Graeme Samuel, ACCC, Regulatory Update for 2008, Speech to Australia Telecommunications Users Group Annual Conference, Sydney, 13 March 2008.

⁷ OECD (2003), 'The Benefits and Costs of Structural Separation', Draft Report of Working Party No. 2 on Competition and regulation, DAFFE/COMP/WP2 (2003)2, OECD, Paris, 10 January.

vertically-integrated structure. In contrast, behavioural regulation can never be fully effective in this way as it is reactive, rather than pro-active;

- alignment of the incumbent's incentives with those of non-integrated carriers; and,
- reduction of the need for regulation as incumbents have fewer incentives to abuse market power.

Central among the suite of reforms to build competitiveness within the sector must be the establishment of an independent wholesale company – which is appropriately incentivised to promote the achievement of these objectives. The organisation must also operate in a regulatory framework that features appropriate penalties for failure to achieve maintain competitive independence. The continued reform of the sector should be pursued in a method to achieve four principle objectives:

- long-term maintenance of established Telstra shareholder value;
- the encouragement new market entrants;
- the incentivisation of innovation; and,
- promotion of value for money for business and private consumers.

The reforms advocated by the 1992 National Competition Policy Review Committee, through the Hilmer Report, which in part underpinned the telecommunications sector reforms of the 1990s recognised the importance of action to address the dominance of natural monopolies. The Report advocated the separation of natural monopoly components (such as the fixed copper network) from competitive functions (such as retail services). The infrastructure industry supports the long overdue application of many of the recommendations from the Hilmer Report to the current industry reform programme.

The Hilmer Report noted that if industry reform strategies, including privatisation, fail to produce the necessary change to support effective competition, a second phase of reform potentially involving further structural reform may be necessary. Tellingly, the report stated:

*'there is a risk that across all asset classes privatisation without appropriate restructuring may entrench the anti-competitive structure of the former public monopolies, making structural reform even more important.'*⁸

The Report went on to advocate, if necessary, the use of legislative separation, similar to that currently being proposed for Telstra:

*'in an extreme case, it may be appropriate for specific legislation to be passed, possibly by the Commonwealth Parliament, to prevent privatisation of the monopoly or to effect a divestiture of the privatised monopoly.'*⁹

⁸ Hilmer F (Chair) (1992) 'Hilmer Report', National Competition Policy Review Committee p 215

⁹ Hilmer F (Chair) (1992) 'Hilmer Report: Executive Summary', National Competition Policy Review Committee p xxxi

3.3.1 International Experience of Separation in the Telecommunications Sector

While little international experience exists for the vertical separation of a dominant industry participant, the separation of vertically integrated telecommunications service providers has previously been implemented in the United Kingdom (voluntary functional separation in 2005) and New Zealand (legislated functional separation in 2006).

Despite the short period of time that has transpired following reform in the UK and New Zealand's telecommunications industry, the reform of both industries is regarded to have played a significant role in increasing the international competitiveness of the domestic telecommunications sectors of both nations.

Recently, the governments of several other nations including India and Singapore have announced the consideration of vertical separation within their domestic industries in recognition of the success in the UK and New Zealand. The Government of Singapore announced that the provider of the nation's proposed broadband network would also be vertically separated, with assets from the existing industry participants transferred to the new infrastructure provider. Similarly, the Government of India has announced they are considering the replication of the UK model for the separation of the dominant market participant Bharat Sanchar Nigam Ltd (BSNL)¹⁰.

The underlying objectives of the Commonwealth Government's proposed reform of the Australian telecommunications industry closely resemble those of the governments of other countries pursuing similar reform objectives.

3.3.2 Vertical Separation

Recent international experience, including that of the United Kingdom, New Zealand and Singapore, supports the vertical separation of dominant telecommunications market operators. The infrastructure industry recognises the economy-wide benefits that have been experienced internationally through the operation of a strong, open and competitive telecommunications market. Reforms to the Australian market to support similar outcomes are welcome and overdue.

Through moving to the 'two-Telstras' model, based on either structural or functional separation, new competitive tension can be introduced to the marketplace at retail level in the current fixed line market over the short-term.

The Government's proposed voluntary structural separation of Telstra, as the dominant vertically integrated telecommunications service provider, is the ideal outcome of the current reform program.

¹⁰ Philip, T & Monga, D. (2009) BSNL Looks to Emulate BT Revamp', *India Times*, <http://infotech.indiatimes.com/articleshow/4049915.cms> last visited 7/10/09

Following the introduction of the NBN, it is likely that the existing copper network will become devalued and eventually obsolete, subsequently threatening total shareholder value. However, through the separation of the entity, the value of the Telstra retail business, including fixed line retail and arguably the world's fastest 3G mobile service, is assured. It is likely that an independent wholesale business would also open itself to increased flexibility in terms of long-term innovation and practices such as unbundling, which have the potential to boost efficiency and productivity of the entire network.

Over the longer term, the 'two-Telstras' model would also assist in ensuring the take-up of services on the NBN through removing disincentives for Telstra's full participation in the network. Less competitive pricing strategies within the domestic telecommunications market, such as those associated with the introduction of HFC Cable; indicate that under the current market regime significant disincentives may not exist to discourage these practices.

The structural separation of the wholesale and retail components of Telstra would fundamentally change current incentives for wholesale pricing practices which could artificially suppress prices for one retailer. Instead new incentives will be created in both the retail and wholesale markets for innovative business practices.

3.3.3 Horizontal Separation

IPA supports the introduction of horizontal separation to the Australian telecommunications industry in so far as it facilitates competition between market participants and promotes the optimal use of all established infrastructure.

The level of Telstra's horizontal integration across all Australian telecommunications platforms, including fixed line, mobile, co-axial fibre cable and Foxtel cable; is unusual if not unique among advanced economies. Telstra's integration across all telecommunications technologies has significantly contributed to the organisation's ongoing dominance in the Australian telecommunications market and has allowed the organisation to utilise undue influence to block market participants.

Critically, Telstra's strong horizontal integration is the direct result of the structure of the organisation's privatisation in the 1990s and the ongoing regulatory structure of the market.

The proposed horizontal separation of Telstra business units at the wholesale level, centred on key service offerings is an appropriate strategy to address these concerns. The requirement for horizontal separation within the telecommunications sector is based on international precedent and will assist in the promotion of competition within the sector.

The promotion of increased competition across telecommunications platforms while allowing Telstra the flexibility to choose its future technological path is welcome as it provides a degree of flexibility

to the organisation, and existing shareholders, to promote value through determining the future direction of the organisation. The achievement of the Government's long-term objectives can only be achieved through the continued participation of all market participants, including Telstra, in those sectors through which the organisation can promote competition, national productivity and innovation, while encouraging a variety of sectoral participants across technological solutions.

Under the proposed horizontal separation of Telstra, sufficient flexibility must be maintained to support the sale on commercial terms of established fibre assets to the NBN, if of sufficient value to the NBN Co.



Conclusion

4. Conclusion

Infrastructure Partnerships Australia supports the commitment of the Commonwealth Government to the creation of an open and competitive telecommunications sector that promotes innovation and the delivery of value for money services for consumers and businesses.

The infrastructure sector supports the Commonwealth Government's proposed reforms of the Australian infrastructure sector through the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009*. The continued reform of the sector should be pursued in a method to achieve four principle objectives:

- encouraging new market entrants;
- incentivising innovation;
- long-term maintenance of established Telstra shareholder value, and,
- promoting value for money for business and private consumers.

The reforms proposed by Government, principally the vertical and horizontal separation of the incumbent dominant industry participant – Telstra – to promote competition will be critical to the achievement of long-term value from the nation's telecommunications infrastructure.

The introduction of the NBN provides the single largest investment in infrastructure in the nation's history; however the delivery of new infrastructure must be accompanied by continued reform of the existing market to promote efficiency in the existing market. Given the scale of the investment being undertaken, the case for ensuring the right market conditions which foster value for money and leverage the benefits of the infrastructure are clear. The infrastructure sector recognises the current reform agenda, underpinned by the essential duplication of the existing fixed line network, represents a substantial, once in a generation opportunity to fundamentally alter market structures that underlie the national telecommunications industry.

In addition to the creation of a world's best practice market for broadband services it is vital that the government utilises the current opportunity for the reform of the existing network in order to drive the achievement of the above-stated four reform objectives.

