

Australian Broadband Strategies: Putting Broadband Take-up in Context

Caroline Lovell and Toby Ryston-Pratt consider the take-up of broadband in Australia and Government initiatives.

"Broadband communications technologies can deliver substantial economic and social benefits to Australia. They reduce the constraint of distance and greatly increase the quality of communications in many sectors. Their defining characteristics (always-on) enable a paradigm shift in the way people or resources interrelate. In short, broadband technologies can transform the way people live, work and do business."

Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government

For several years broadband has been heralded as the "next big thing" in telecommunications technology and "the key to Australia's on-line future".¹ Analysts suggest that broadband will be to the information economy what road and rail have been to the industrial economy.² However, despite its promise, broadband remains in an early stage of development with relatively low take-up in Australia by comparison to other countries.

The potential economic and social benefits associated with broadband and Australia's low broadband take-up have resulted in extensive political scrutiny including a stream of inquiries and reports suggesting how Australian telecommunications companies can do more to roll out broadband or how the Government should remove impediments to the adoption of broadband. Yet despite this, broadband take-up remains problematic: the content available using broadband is relatively limited; the costs of deployment remain high by comparison with narrowband; there has been a perceived lack of competition in the broadband market; and access to broadband networks is limited in regional and remote areas.

This article considers the take-up of broadband in Australia, analyses the strategies which have been implemented to develop broadband infrastructure and take-up, and considers the problems which have apparently been causing Australia to fall behind in the broadband market.

WHAT IS BROADBAND?

Generally speaking, broadband means "high bandwidth". Broadband enables greater speed and information-carrying capacity than a standard, or

narrowband, dial-up connection. Although there is some debate as to what level of access constitutes "broadband", Internet services are usually described as broadband if they provide always-on data services of 200 kilo-bits per second (kbps) or more.³

Traditional dial-up Internet users connect to their Internet service provider (ISP) using a phone line and a modem. Broadband users connect using a variety of technologies, including cable, digital subscriber line

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(DSL), satellite and wireless Internet. In Australia, DSL and cable are the most common forms of connection. Cable now runs past 2.7 million Australian homes in capital cities, using the same high speed cable infrastructure that provides pay TV. DSL uses existing telephone lines and a range of frequencies not used in normal voice communications. It has the potential to reach more Australians than cable but is not available everywhere. Asynchronous Digital Subscriber Line (ADSL) is the most prominent of a number of DSL technologies.⁴

Broadband is faster than dial-up Internet and, depending on the connection used, broadband can result in download speeds up to 50 times faster than dial-up modems, resulting in significant time savings and increases in productivity.⁵ Broadband also makes things possible that are not feasible with a standard dial-up connection. For example, broadband:

- allows applications such as full motion real time video, music and games;
- makes it possible to download a file, browse the web and check email simultaneously;
- enables faster and therefore potentially more enjoyable online gaming;
- provides a constant connection to the Internet with no dial-up, no hourly rates, no engaged signals and no drop-outs; and

- does not require a second phone line dedicated to the Internet.

Analysts suggest that the advantages of broadband will translate into significant economic benefits over time. The OECD describes broadband networks as "*an important platform for the development of knowledge-based global, national, regional, and local economies.*"⁶ In Australia, it is predicted that broadband will add \$90 billion to the economy by 2015.⁷

For businesses, broadband can facilitate faster access to information, more productive operational systems, intranets and extranets and the ability for networks to handle more traffic, transport bigger files and use more complex applications.⁸ According to the 2003 Yellow Pages E-Business report, 82% of small to medium businesses in Australia now have Internet access.⁹ A further survey, conducted by the Australian Industry Group, suggested that 73% of businesses with broadband connection indicated that connection to broadband technology had a positive impact on their efficiency and productivity.¹⁰

Through wireless technologies, such as two-way satellite, broadband can also present a solution to last mile connectivity in regional areas. As the US Federal Communications Commission notes, "*fully-evolved broadband will: virtually eliminate geographic distance as an obstacle to acquiring information, and dramatically reduce the time it takes to access information.*"¹¹

Broadband also has particular advantages in the public sector. Broadband can improve the "*efficiency, availability and reach*" of services such as health, education and government services. At a consumer level, broadband is also said to "*enhance quality of life*" by providing economic, social and cultural, development.¹²

BROADBAND TAKE-UP

Despite the potential advantages broadband take-up in Australia remains moderate. According to the most recent figures released by the Australian Competition and Consumer Commission (ACCC), the total broadband take-up in Australia at 31 December 2003 was 698,700 services. This figure represents a 92% increase in the 12 months from 31 December 2002.¹³ A study by Nielsen/Netrating suggests that between March and April 2004 the number of individuals with access to a home connection jumped 300,000 to 2.1 million, largely in response to increased retail price competition (as discussed below).¹⁴ Differences in figures appear to result from differences in the definition of broadband and from the particular services included. The most significant growth has been in the take-up of DSL technologies. While this growth is healthy, it is not the "broadband revolution" that many have predicted.

Australia's broadband take-up does not compare internationally. OECD research indicates that there are only 2.5 broadband subscribers per 100

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The Communications and Media Law Association is holding an essay competition in 2004.

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A prize of \$1,000 and a one year membership of CAMLA will be awarded to the winner.

The winning essay, edited in consultation with the author, will be published in the Communications Law Bulletin.

The winning entry, to be selected by a panel of experienced communications and media law practitioners, must demonstrate original research, analysis or ideas. The Panel will not necessarily be seeking detailed works of scholarship nor is it seeking a restatement of the law. The Panel will regard highly original consideration of legal policy development and its broader implications.

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Only one essay per student may be submitted. Entries will be accepted by e-mail or by post. Entries WILL NOT be accepted by fax. Entries submitted by post should include three (3) copies of the entry, typed well-spaced on A4 paper. The name, address, e-mail, telephone and fax contacts and the tertiary institution and course in which the author is enrolled should be included on a separate, detachable sheet. Entries submitted by e-mail should include the same details in a separate e-mail from the entry. The authors name should not appear on the pages of the essay.

Entries are to be submitted to:

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By 29 October 2004

Late entries will not be accepted.

inhabitants in Australia. This ranks Australia 22nd in the number of broadband users per 100 inhabitants, behind countries including Korea (23 subscribers per 100 inhabitants), Canada (13), Sweden (9), the United States (8) and Japan (8.5).¹⁵ It is estimated that by the end of 2008 Australia's penetration rate will have only reached 13%.¹⁶

South Korea is currently the world leader in broadband take-up. At the end of July, 2003, South Korea's broadband population stood at 10.54 million with more than two-thirds of South Korean households connected to high-speed Internet access.¹⁷

However, Australia is not alone in its low take-up rates. The Infocomm Development Authority of Singapore is concerned that the rate of shift from narrowband to broadband is not as fast as expected. In 2001 the penetration rate in Singapore was 17.7%. They aim to have 50% by 2006.¹⁸ Broadband take-up is also slow in the United Kingdom, where only 9% of households have broadband.¹⁹ The United Kingdom is ranked 20th in the most recent OECD figures on broadband penetration.²⁰

Despite a low take-up to date, Australian industry remains positive about broadband and continues to predict a boom. This optimism perhaps reflects Australia's stronger position in terms of broadband take-up in the business sector. Although detailed international comparisons on the take-up of broadband in business are not available, Australia's position is healthier in this sector²¹ and comparative figures on business sector may provide a more useful illustration of Australia's position in the broadband market.²²

GOVERNMENT INITIATIVES TO INCREASE BROADBAND TAKE-UP

As a result of the potential economic and social benefits associated with broadband, the importance of broadband has been recognised as a key policy issue by developed nations. The role of governments in developing broadband is critical. As noted in the

Broadband Advisory Group (BAG) Report:

*"[t]he Government plays a vital role, through its policy settings, leadership and by establishing the regulatory framework, in supporting the ongoing development of the broadband market in Australia."*²³

Responses

A number of inquiries have been commissioned in recent years to investigate and report on the standard of telecommunications services in Australia, each touching on the potential development of broadband in Australia, including:

- The National Bandwidth Inquiry reported in December 1999 that there was considerable capacity in Australia's backbone (inter-exchange) network.²⁴
- The Telecommunications Service Inquiry, in 2000, found that a range of alternative service delivery options are emerging for high speed data services, providing greater choice and competition.²⁵
- The Regional Telecommunications Inquiry (RTI) identified specific benefits of broadband for regional users including greater access to services such as online banking, government services and information, online education and health services and the ability to exchange detailed information between people and organisations, quickly and relatively cheaply.
- The House of Representatives inquiry into wireless broadband technologies, *Connecting Australia! Wireless Broadband*, considered wireless technology as a broadband alternative, particularly to provide a "last mile" solution in rural and regional areas.²⁶

The Commonwealth Government has also made investments in broadband and telecommunications infrastructure through programs including:

- The \$50 million National Communications Fund aimed at encouraging the development of

broadband infrastructure and applications to improve education and health services delivery to regional Australia. The fund plays an important role in bridging service and infrastructure gaps in remote parts of Australia.

- The \$36 million Advanced Networks Program to support the development and demonstration of advanced networks and the \$42.5 million Australian Research and Education Network.
- The \$464 million Networking the Nation Program to help bridge the telecommunications gap between urban and regional Australia.

Government programs have also been developed specifically to encourage the development of broadband content.²⁷ In addition, most state and territorial governments have plans and initiatives for broadband services, for example, for use in schools.

Perhaps the most significant Commonwealth investigation into Australian broadband infrastructure is the BAG Report, *Australia's Broadband Connectivity*, released in January 2003. The BAG was formed in March 2002 to advise the Federal Government on broadband issues including consulting with stakeholders and the public. The BAG was chaired by the Minister for Communications, Information, Technology and the Arts and included representatives from industry and from State Government, consumer groups and industry forums. The BAG also established a group of Global Advisers (from Sweden and the USA, Canada, France and the UK but not, interestingly, from South Korea) to provide international perspective (although an Australian - Korean broadband forum was held in May 2003).

The BAG Report analysed Australia's broadband take-up and looked at Government responses to broadband in Australia.

The BAG recommended that Australia should adopt the following vision:

"Australia will be a world leader in the availability and effective use of broadband, to deliver enhanced

outcomes in health, education, commerce and government and to capture the economic and social benefits of broadband connectivity.”²⁸

The BAG also set the following national goals:

- Broadband should be available to all Australians at fair and reasonable prices; and
- Market arrangements should be pro-competitive and encourage investment in infrastructure, services, applications and content, and should advance the longer term interests of end users.

To meet these goals, the BAG recommended the development of a National Broadband Strategy and the formation of a National Broadband Strategy Implementation Group (NBSIG). The BAG’s recommendations were focused on specific areas and strategic development rather than just take-up. This was reflected in recommendation 19 which stated:

“The Government should monitor and evaluate the implementation of the national strategy to ensure effective outcomes. This should include measurement of Australia’s international position in relation to the availability and effective use of broadband in key sectors. The Government should also encourage the OECD to introduce mechanisms that measure the effective use of broadband and not merely take-up.”

Other BAG recommendations included:

- the Government should consider initiatives to develop services that may not be commercially viable but which could potentially deliver significant economic, security and social benefits;
- all tiers of government should cooperate to develop demand aggregation strategies to stimulate broadband investment and provision



of services in key sectors such as health and education as well as in regional areas;

- all schools and educational institutions should be connected to broadband internet;
- the Government should give priority to establishing an Australian Research and Education Network;
- the Government, should develop plans for connectivity infrastructure to improve the health system;
- the Government should encourage increased take-up of broadband by SMEs to deliver improved economic growth and employment levels; and
- the Government should implement initiatives to develop a culture of security and authentication to encourage market confidence in broadband applications.²⁹

The BAG also recommended a flexible regulatory regime and policy setting, noting that “the regulatory regime should continue to create effective pro-

competitive market arrangements that encourage investment in infrastructure and applications.”³⁰

Progress since the BAG Report

The NBSIG held its inaugural meeting on 13 August 2003. This is part of a \$142.8 million National Broadband Strategy announced in the Australian Government’s response to the RTI and is to contribute towards the vision of the BAG.

According to a media release issued by the then Minister for Communications, Information Technology and the Arts, Senator Richard Alston, the NBSIG will assist the Australian Government in the implementation of its broadband initiatives, including those announced under the National Broadband Strategy. These initiatives include:

- \$8.4 million for demand aggregation brokers - to bring together broadband demand to access reduced prices and access to improved broadband services;

- \$23.7 million for the Coordinated Communications Infrastructure Fund which will accelerate the roll-out of broadband into regional Australia; and
- \$107.8 million for the Higher Bandwidth Incentive Scheme to enable regional Australians to access broadband services at prices comparable to those in metropolitan areas.

These initiatives build on the investments outlined above and, according to the DCITA, "will allow broadband investment across all levels of government to be coordinated with regional priorities and the needs of key sectors such as health and education, while also providing a national focus to all activities."³¹ The National Broadband Strategy was endorsed by the Australian Government and all states, with the exception of Victoria, on 26 September 2003.³² Victoria has, to date, declined to endorse the strategy.

Senator Alston's successor as Minister for Communications, Information Technology and the Arts, the Hon Daryl Williams MP, released the National Broadband Strategy at the Australia Telecommunications Conference on 3 March 2004. The following key priority issues have been identified, and these will be the focus of Government actions:

- a national co-ordinated approach through the National Broadband Strategy;
- government policy to support the development of competitive markets and targeted funding from all levels of government for broadband initiatives;
- building user understanding of the benefits of broadband;
- the development of skills in broadband applications to enable individuals, organisations and communities to apply the tools and knowledge provided by broadband;
- the development of Australian digital content;

- regional and sectoral demand aggregation;
- the protection of critical information infrastructure; and
- the development of measures to encourage broadband deployment in the planning of new residential and business developments.³³

On 18 June 2004 the then Minister announced the approval of the first two ISPs under the Government's Higher Bandwidth Incentive Scheme. Services are scheduled to be rolled out in regions south-west of Perth in July 2004.

Since the BAG, the Government has also taken steps to develop consumer and industry understanding about broadband. In October 2003, the National Office for the Information Economy released the "Broadband Resource Kit" which contains information about the benefits and availability of broadband and explains the National Broadband Strategy.

The Government also released a determination which directly implements Recommendation 19 of the BAG Report. The Monitoring and Reporting on Competition in the Telecommunications Industry Determination 2003 (No. 1) (Determination) is made under subsections 151CMA(1) and (3) of the *Trade Practices Act 1974* (Act). The Determination requires the ACCC:

"to monitor and report on the availability and take-up of retail and wholesale broadband services, on a sector-by-sector and geographic basis and classified by sector, technology type and transmission speed."

The Determination is consistent with previous policy decisions aimed at opening up competition in broadband services. The first report under the arrangement has not yet been released, however the ACCC has, since 2001, prepared reports which provide a snapshot of broadband deployment in Australia and will continue to do so until the reports pursuant to the Determination commence.

Finally, the Senate Environment, Communications, Information Technology and the Arts Reference Committee has also considered the issue of competition in broadband services and is expected to table a report in August 2004.³⁴

EVALUATING AUSTRALIAN BROADBAND INITIATIVES

Factors in Australia's broadband future

The BAG Report set the ambitious goal for Australia to become a "world leader in the availability and effective use of broadband". Based on its current position, Australia is a long way from achieving this aim.

The reasons for the growth of broadband penetration in other countries, compared to Australia, are varied. Ewan Sutherland, Executive Director of INTUG, notes that, no "one country or continent has all the elements of global best practice" and each has individual factors which have contributed to broadband penetration. Nevertheless, there are a number of factors which are common to the success of broadband internationally and require attention in Australia.³⁵

National Strategies

By comparison with other countries, Australia has been slow to implement strategies to improve broadband take-up. The Australian Government has been accused of lacking commitment, urgency and enthusiasm in relation to broadband initiatives and broadband development has arguably been hampered by a lack of centralised coordination and national policy, despite the number of Government reports which have been produced in recent years.

In South Korea, where broadband penetration is greatest, government involvement has played a key role. Largely as a result of South Korea's "e-Korea" policy, South Korea has developed from a country which recorded its first Internet connection in 1994, to be the world leader in broadband.³⁶ The Korean government plans to ensure that all government agencies and schools, from elementary

to university, are connected to broadband. It has also hastened the installation of broadband in office buildings and apartment complexes.

A similar situation has emerged with respect to Japan who are now 9th in OECD figures after having no broadband market at the end of 2000. Japan's government strategy has focused on encouraging competition in the Japanese telecommunications market. The policy has included introducing provisions specifically targeted to the advantage of new entrants at the expense of incumbent telcos.³⁷

Despite the criticism which has been levelled at Australian responses, recent developments, including the BAG Report, represent a significant advance in the focusing and coordination of Australian broadband strategies. The establishment of a National Broadband Strategy demonstrates an intent to form a position on broadband policy and implement a coordinated strategy to improve penetration. This step also brings Australia into line with the initial approaches taken by countries like South Korea, and mirrors the current approach being taken in the United Kingdom. (Britain's broadband taskforce is aiming to give Britain the most extensive and competitive marketplace for broadband in the G7 by 2005 as part of a government strategy to make it the best place in the world for e-commerce.)

The key ingredient in countries that have high broadband uptake appears to be government and industry cooperation, as opposed to reliance on government intervention. This was recognised by the BAG.³⁸ The introduction of the NBSIG is intended to mark a significant turning point in Australian broadband development.³⁹ However, while credit must be given to the Australian Government and the BAG for developing the National Broadband Strategy, there is still significant ground to be made up if Australia is to keep pace with international developments in broadband technology. Inquiries have enhanced broadband awareness but are only one step in improving the Australian broadband market.

Geography

Geography presents a major challenge for the deployment of telecommunications infrastructure in Australia (particularly last-mile connectivity) and one that is not limited to the broadband context. Countries that enjoy comparatively high broadband penetration such as South Korea, Japan and Hong Kong have high population densities, making the deployment of broadband technologies cheaper and easier.

By comparison, the Australian population is spread over large areas, with vast parts of Australia only sparsely populated. The task of providing telecommunications access to all Australians difficult. As a result, broadband penetration in Australia is currently much lower in regional areas compared with metropolitan areas.

Despite the difficulties associated with rolling out broadband to all Australian, the advantages associated with broadband are particularly important for regional areas.⁴⁰

Pricing and Consumer Awareness

Prices for higher bandwidth services are more expensive than traditional narrowband dial-up services and access in Australia is more expensive than in other countries, including Canada, the United States,⁴¹ Japan and Korea.⁴²

The range of plans incorporating price caps, varying connection speeds and download levels, (with additional charges or speed restrictions for excess usage), can also be confusing for consumers.

Competition

Competition has been a key factor in the growth of broadband penetration in many countries. As the OECD notes, "The active engagement of the private sector in a competitive marketplace is the best way to facilitate ongoing and new investment in broadband, and to maximise the capacity to assess the potential risks and returns."⁴³ For example, Japan's pro-competitive regulatory environment has resulted in aggressive competition among broadband operators and sparked significant growth in the Japanese broadband market.⁴⁴

The Australian Government has recently started to take active steps to improve competition. For example, Determination brings Australia into line with telecommunication markets around the world, including the United States, the United Kingdom and the European Union. Although Australia does not compare with countries such as Korea, the world leader in household broadband take-up, Australia does have particular strengths in on-line applications in the areas of health and education.⁴⁵ The new monitoring requirements should assist in identifying the potential benefits of developing broadband in particular sectors such as education, health and research, rather than simply highlighting Australia's low overall broadband take-up.

A further factor which has effected broadband competition in Australia is the role of Telstra and continuing debate over whether broadband competition should occur at an infrastructure level or only at a services level. Because Telstra owns the national network of copper telephone wires in Australia, DSL providers have had to deal with and rely on Telstra when providing services. According to analyst, Paul Budde:

*"There is global acceptance of the fact that, in most cases, the basic infrastructure will result in a natural monopoly - it doesn't make business sense to duplicate such infrastructure. Competition will take place between the services that are provided over the network."*⁴⁶

Nevertheless, telcos such as Optus have reserved the right to place their own infrastructure in Telstra exchanges in the future and the Australian Competition and Consumer Commission (ACCC) has made it clear that it would like to see competition in broadband infrastructure.⁴⁷

In March 2004, the ACCC issued Telstra with a competition notice after Telstra reduced the price of its retail service to customers, while still selling its wholesale prices to other ISPs at prices in excess of Telstra's retail offering. The competition notice required Telstra to either modify or

justify its behaviour within a reasonable period of time or risk fines of up to \$10 million, as well as \$1 million for each day that the conduct continued. In response, Telstra released a revised wholesale broadband pricing structure and has negotiated a series of wholesale arrangements.

Despite the failure of some second and third tier telcos in Australia there are still positive signs. Companies such as Primus Telecom have apparently benefited from recent dissatisfaction experienced by Telstra Bigpond customers.⁴⁸ Further, a number of fixed wireless broadband providers are emerging in Australia, with the potential to increase broadband coverage, especially in rural areas. The two largest new entrants are "Unwired Australia" (**Unwired**) and "Personal Broadband Australia" (**PBA**). PBA plans to offer wireless broadband to up to 75% of Australia's population, and it is envisaged that Unwired's network will cover approximately 70% of the Australian population, including 1.2 million homes in Sydney.⁴⁹

Content

Another reason for not upgrading Internet connections to broadband is the lack of compelling content to make upgrading worthwhile. As the former Minister for Communications, Information Technology and the Arts, Senator Richard Alston stated in an ABC interview in 2002, *"at the moment it's pretty much more of the same but a bit faster for most consumers."*⁵⁰

The BAG Report acknowledged this problem, noting that "take-up is unlikely to expand unless consumers are presented with content that fully embraces the functionality that the infrastructure can provide."⁵¹ However, despite the creation of a number of funds to promote the development of broadband content, broadband lacks a "killer application" to drive implementation. In South Korea, online gaming has been a key driver of broadband sales.⁵²

Australia needs increased awareness of the benefits associated with broadband. Chris Dalton, Project Director of the Service Provider Industry Association claims:

*"[i]t is clear that while there is much talk about technologies, prices and competition aspects, too little attention is paid to why users should subscribe to broadband services."*⁵³

Unreliability and poor technology

A recent report by the Australian Communications Authority, *Broadband Quality of Service Issues: Consumer Perspectives*, indicated that consumer issues are at the forefront of the problems surrounding broadband in Australia. Many consumers and businesses are being turned off broadband connections by the unreliability and poor technology of current systems, especially ADSL.⁵⁴

Even when networks are functioning correctly, broadband speeds are often slower than anticipated. The use of pair gain technologies also means that many people are currently not technologically able to receive ADSL technologies.⁵⁵ Satellite services and wireless technologies also present technological difficulties in many geographic locations. If broadband take-up is to improve, it is critical that consumers are provided with reliable, consistent and well-informed support, as well as simple terms and conditions of service.

Technological developments will play a large part in the future of broadband. Already, wireless technology is emerging as a solution to service the black spots in Australia where broadband services using fixed technologies are unavailable. The economic benefits associated with broadband will also increase as what many describe as "true" broadband becomes readily available. Currently, broadband services in Australia offer around 512 kilobits per second through DSL and between 500 kilobits and 2 megabits per second through cable. Better broadband technologies will deliver speeds of more than 10 megabits per second, while some international companies are already talking about future speeds which are measured in gigabits per second.⁵⁶

Criticism has been levelled at the Australian Government that too many reports about broadband have been produced with too little resulting action.⁵⁷ While the BAG Report represented an advancement in the development and implementation of Australian broadband strategies, it is important that the Australian Government continues to build on this position and take a more assertive stance towards implementation of broadband strategies and the monitoring and (if necessary) regulation of the broadband market. The Government also needs to continue to look at subsidising projects to expand the broadband network in Australia.

At an industry level, broadband take-up can be encouraged by the development of content and systems that require broadband technology. For example, entertainment systems such as on-line gaming via consoles like the Xbox and Playstation 2.⁵⁸ Positive steps can also be made through industry cooperatives such as the Broadband Xchange which provides plain English information about the different broadband services available as well as tools to help users evaluate the offerings of different providers and find solutions to technical difficulties and business problems.⁵⁹

To ensure that the Australian economy keeps pace with worldwide developments it is essential that the Australian Government and industry members take, and maintain, a more coordinated and proactive stance towards the implementation of broadband in Australia.

Caroline Lovell is a partner and Toby Ryston-Pratt is a paralegal at Clayton Utz, Sydney. Assistance was also provided by Danielle Di Pietro a solicitor at Clayton Utz. A more detailed version of this article was given as a paper at the January 2004 Pacific Telecommunications Conference.

¹ "Broadband, broadband, broadband", <http://www.atug.com.au/article.cfm?newsid=125>.

² Broadband Advisory Group (BAG), Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government, 2003, 16.

³ BAG, Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government, 2003, 7.

⁴ Australian Competition and Consumer Commission (ACCC), "Snap Shot of Broadband Deployment as at 30 June 2003" <http://www.accc.gov.au/content/index.phtml/itemId/512240>.

⁵ "Why Use Broadband?", <http://www.broadbandxchange.org/abb/c01p020.htm>.

⁶ OECD, "Broadband Driving Growth: Policy Responses", 9 October 2003 <http://www.oecd.org/dataoecd/18/3/16234106.pdf>, 2.

⁷ Paul Budde, "Australia - Broadband - Broadband Economy", 10 November 2003 <http://www.budde.com.au>, 1.

⁸ Stephen Butler, "Australia's broadband future", National Business Bulletin, July 2001, 24 at 24-5.

⁹ Quoted in "Why Use Broadband?", <http://www.broadbandxchange.org/abb/c01p020.htm>.

¹⁰ Australian Industry Group, "Towards the next generation of broadband technology: A survey of Australian industry on the use of advanced telecommunications", 30 October 2003, 14.

¹¹ "FCC Strategic Goals: Broadband", <http://www.fcc.gov/broadband/>.

¹² OECD, "Broadband Driving Growth: Policy Responses", 9 October 2003 <http://www.oecd.org/dataoecd/18/3/16234106.pdf>, 2.

¹³ Australian Competition and Consumer Commission (ACCC), "Snapshot of Broadband Deployment as at 1 December 2003" <http://www.accc.gov.au/content/index.phtml/itemId/512240>.

¹⁴ Sue Lowe, "Broadband users top 2 m mark: The Age, 28 May 2004.

¹⁵ OECD, "ICCP Broadband Update", 2-3 October 2003 <http://www.oecd.org/dataoecd/18/9/18464850.pdf>. See also Bill Bennett, "Broadly Speaking", Sydney Morning Herald, 19 August 2003, 10 (Supplement).

¹⁶ IDC, The Australian Broadband Market Services and Equipment Analysis and Forecast, 2003-2008.

¹⁷ "KT Eyes Rapid Broadband Expansion in Asia", Korea Times, 22 August 2003.

¹⁸ Angela Tan, "What's ailing Singapore's broadband market?", The Business Times Singapore, 11 August 2003 (BIZ IT).

¹⁹ "OfTel's Internet and Broadband Brief", July 2003, http://www.oftel.gov.uk/publications/internet/internet_brief/broad0703.htm. See discussion of UK take-up in Mark Hollands, "Inquiries fail to spur growth", Australia IT, 26 August 2003; and Pamela Clark-Dickson, "BT Broadband", CommsWorld, June 2002, 20-1.

²⁰ OECD, "ICCP Broadband Update", 2-3 October 2003 <http://www.oecd.org/dataoecd/18/9/18464850.pdf>.

²¹ OECD figures on business uptake are confined to European countries and are related to figures from 2001. See Australian Industry Group, "Towards the next generation of broadband technology: A survey of Australian industry on the use of advanced telecommunications", 30 October 2003, 6.

²² Australian Industry Group, "Towards the next generation of broadband technology: A survey of Australian industry on the use of advanced telecommunications", 30 October 2003, 6.

²³ BAG, Australia's Broadband Connectivity: The Broadband Advisory Group's Report to

Government, 2003, 40.

²⁴ Australian Information Economy Advisory Council, National Bandwidth Inquiry, December 1999, 71-72

<http://www.noie.gov.au>. Discussed in the report of the Regional Telecommunications Inquiry (RTI), Connecting Regional Australia, 8 November 2002, 166 <www.teleinquiry.gov.au/rti-report.html>.

²⁵ TSI, Connecting Australia, Report of the Telecommunications Service Inquiry, September 2000, 108.

²⁶ House of Representatives Standing Committee on Communications, Information Technology and the Arts, Connecting Australia! Wireless Broadband, November 2002, www.aph.gov.au/house/committee/cita/Wbt/report.html.

²⁷ For example, the \$2.1 million Broadband Content Fund, the Copyright Amendment (Digital Agenda) Act 2000 to reform intellectual property rules to protect the rights of content developers, \$12.4 million in funding for a new Cooperative Research Centre for Interaction Design to undertake research into human interaction with emerging technologies and the Le@rning Federation to develop to develop online educational content for schools. Discussed in BAG,

Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government, 2003, 10-11.

²⁸ Ibid, 1.

²⁹ For commentary on recommendations see Louise Banyard, "Broadband strategies for Australia" (2002) 6(8) TeleMedia 107, 107.

³⁰ BAG, Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government, 2003, 39.

³¹ "A National Broadband Strategy", http://www.dcita.gov.au/Printer_Friendly/0,,0_1-2_3-4_115486-LIVE_1,00.html.

³² "Online Council Joint Media Statement", 26 September 2003 http://www.noie.gov.au/publications/media_releases/2003/Sept/oc.htm.

³³ Australia's National Broadband Strategy, Department of Communications, Information Technology and the Arts, www2.dcita.gov.au/ie/framework/broadband.

³⁴ "Inquiry into competition in broadband services" http://www.aph.gov.au/senate/committee/ecita_ctte/broadband_competition/index.htm.

³⁵ Ewan Sutherland, "ATUG Opinion", 11 June 2003 <http://www.atug.com.au/article.cfm?newsid+250>.

³⁶ ATUG, "A Korean Outlook", December 2001 <http://www.atug.com.au/article.cfm?newsid+122>.

³⁷ ATUG, "A recent ITU Paper, Promoting Broadband - the Case of Japan discusses the role of access (via Unbundled Local Loop) in achieving significantly improved broadband penetration", 13 August 2003 <http://www.atug.com.au/article.cfm?newsid=264>.

³⁸ BAG, Australia's Broadband Connectivity: The Broadband Advisory Group's Report to Government, 2003, 47.

³⁹ Senator The Hon Richard Alston, "National Broadband Group marks a milestone in broadband strategy", Media Release, 13 August 2003, http://www.dcita.gov.au/Printer_Friendly/0,,0_1-2_15-4_116361-LIVE_1,00.html.

⁴⁰ OECD, "The Development of Broadband Access in Rural and Remote Areas", 2004

⁴¹ Richard Hogg, "Broadband costs are too high

for most Australians",

The Australian, 4 November 2003, 35 (Computers).

⁴² Ibid, 38.

⁴³ OECD, "Broadband Driving Growth: Policy Responses", 9 October 2003 <http://www.oecd.org/dataoecd/18/3/16234106.pdf>, 4.

⁴⁴ ATUG, "A recent ITU Paper, Promoting Broadband - the Case of Japan discusses the role of access (via Unbundled Local Loop) in achieving significantly improved broadband penetration", 13 August 2003 <http://www.atug.com.au/article.cfm?newsid=264>.

⁴⁵ Senator The Hon Richard Alston, "Broadband direction to spur competition in key sectors", Media Release, 9 May 2003.

⁴⁶ Paul Budde, "Australia - Broadband - Broadband Economy", 10 November 2003 <http://www.budde.com.au>, 2.

⁴⁷ Rachael Osman-Chin, "Optus in Telstra Deal for Home DSL Broadband", Australian Financial Review, 12 November 2003, 55 (Computers). Optus has recently signed an agreement with Telstra to use Telstra's wholesale DSL network to enable Optus to deliver broadband DSL to homes not currently serviced by Optus' cable which does not preclude Optus from building its own broadband infrastructure in the future.

⁴⁸ Adam Turner, "Out Of the Pond, Into the Puddles", Sydney Morning Herald, 28 October 2003, 1 (Computers).

⁴⁹ <http://www.pbba.com.au> and <http://www.unwired.com.au/about/background.php>.

⁵⁰ "Alston dismisses Australian broadband envy", interview on the ABC's "Inside Business", 25 August 2002, <http://www.abc.net.au>.

⁵¹ BAG 35.

⁵² ATUG, "A Korean Outlook", December 2001 <http://www.atug.com.au/article.cfm?newsid+122>.

⁵³ Ibid.

⁵⁴ Natalie Apostolou, "Broadly Speaking, It's Still Not Quite Reliable Enough", The Age, 22 July 2003, 3 (Computers).

⁵⁵ RTI, Connecting Regional Australia, 8 November 2002, 174 www.teleinquiry.gov.au/rti-report.html.

⁵⁶ Bill Bennett, "Around the Corner", Sydney Morning Herald, 23 October 2003, 10 (Supplement).

⁵⁷ Louise Banyard, "Broadband strategies for Australia" (2002) 6(8) TeleMedia 107, 107.

⁵⁸ Emma Connors, "We Have The Technology...Almost", Australian Financial Review, 2 August 2003, 16 (Computers); "Console makers lead the way in broadband", New Media Age, 14 August 2003, 13.

⁵⁹ Chris Dalton, SMEs Drop Ball Where it Matters", Australian Financial Review, 29 August 2000, 31 (Supplement)

Regulators. Mount Up!

VoIP in the Asian context

Nick Abrahams and Brett Farrell consider the emergence of Voice over IP and how it may operate within a regulatory framework.

A PIECE OF A LARGE PIE

Even a small piece of the huge voice telephony market is desirable and worth pursuing. A lot of younger mobile telecommunications companies see Voice over IP (VoIP) as the way to gain market share. VoIP is voice telephony via the internet. It has the ability to bypass the local telephone exchange and cut the telcos out of voice call revenue.

The major telcos won't give up the market without a fight and that fight will be affected by the extent of regulation of VoIP providers. So what's all the fuss about VoIP regulation?

Companies who use VoIP on a virtual private network (VPN) are seeing significant cost savings and, due to the internal nature of the system, are not subject to the extensive regulatory obligations imposed by various governmental authorities (**Regulators**). No fuss there.

VoIP offerings to consumers and business are creating the current fuss. There are issues to consider from a telco industry perspective and also issues from the Regulators perspective.

The fundamental issue is the debate concerning VoIP regulation versus VoIP innovation. In this article we examine the debate surrounding this issue and how various countries are dealing with it. We also examine some common regulatory issues across the Asia-Pacific region and consider if it is possible for VoIP providers to meet the regulations without stifling innovation.

We believe VoIP will, if only to ensure consistency, require specific regulation. The new VoIP companies want to enter the market free from regulatory burden and support their case by claiming they should be considered as

part of the (relatively) regulation-free internet. Most Regulators have taken the view that VoIP services should be regulated in accordance with existing regulations affecting telephone services. Asian trends suggest that regulation will be cautiously implemented to grow VoIP services.

REGULATORY OBLIGATIONS

Numbering Plans

Numbering Plans specify the numbers to be used in connection with the supply of telecommunication services to the public. Numbering Plans generally provide number allocations for mobile numbers, geographically fixed numbers and geographically wide numbers.

The problem facing VoIP operators is how VoIP fits within existing Numbering Plans. Existing Numbering Plans do not cater for IP addresses which in most cases are dynamic numbers assigned to the user when logging onto the internet. Calling line identification, emergency services and number portability are being considered in the context of applying to the Numbering Plan.

Regulators are currently considering how numbering plans will apply to VoIP numbers and it appears likely that a dedicated range of numbers will be assigned to VoIP services.

Law Enforcement and Interception

Law enforcement concerns could be the most difficult to resolve due to the nature of the internet. Common issues facing VoIP providers are how to:

- give officers and authorities such help as is reasonably necessary for the enforcement of:
 - the criminal law and laws imposing pecuniary penalties;
 - protecting the public revenue;
 - safeguarding national security; and
 - ensure that a network or a telecommunication facility has the interception capability to enable communication passing over that network or facility to be intercepted.
- The problem is where does law enforcement "tap" the wire and how many packets need to be captured and how does that happen when packets take multiple paths to the destination. Another problem arises when voice packets are encrypted. It has been suggested that the Regulators should require that a governmental body hold the decryption keys to allow law enforcement to decrypt all messages (assuming the encrypted packets can be captured). Undoubtedly there will be heated argument about who holds those decryption keys. It also raises a whole host of privacy considerations. This could all be even more complicated with recent developments in unbreakable quantum computing cryptography.
- In addition, a VoIP service available in a certain country can be run from a location outside the jurisdiction of that country's law enforcement to tap the service. This will make compliance impossible both in terms of allowing law enforcement access and tracking down those behind the service.

Quality of Service (QoS)

The VoIP industry is currently relying on the strength of its data algorithms to cope with packet loss, jitter and latency

and provide consistent quality of service (QoS). This does not seem like a big issue for VoIP providers.

VoIP services are not yet able to offer the 5 “9”s of 99.999% up time. Generally, it offers 99% and this could lead to multi-tier call charging similar to the Indian regime (discussed later). The Asian trends suggest that QoS is not important to the emerging VoIP market and imposing a 5 “9”s type of obligation upon a VoIP provider could stifle the young companies.

Emergency Services

Access to emergency services via standard telephones is almost a universal regulatory requirement. The question is, do VoIP providers need to comply with the regulations in relation to emergency telephone services?

In order to comply with regulations, VoIP providers may need to ensure that their packets give caller location details to assist emergency services. A secondary complication is that VoIP services do not take power from the local exchange. In the event of power failure, VoIP services will not be able to operate.

Operator and directory assistance and itemised billing

VoIP customers will want access to operator and directory assistance services. A likely solution is for the VoIP to provide these services itself or to arrange for a third party to provide these services by agreement.

Regulations often require providers to provide itemised billing for each call. It is not entirely certain how a VoIP provider will comply with itemised billing when providing bundles of minutes to a customer.

THE GLOBAL CONTEXT

To put the Asian experience into context, it is worthwhile to examine how countries outside the region are dealing with this quickly emerging technology.

United States – the regulatory recalcitrant

In the US, initial court decisions have found that VoIP is an “information service” rather than a “telephony

service” (*Vonage Holdings Corporation v Minnesota Public Utilities Commission (MPUC)*). An information service brings VoIP into the internet space, which is unregulated in the US. The US Congress left the internet unregulated for competitive and developmental reasons.

The court ignored the MPUC’s “quacks like a duck” argument where it was suggested that VoIP offers voice telephony just like a standard regulated telephone service. Therefore, just because VoIP uses a different infrastructure to a standard telephone service does not make it any different to a standard telephone service, in effect, VoIP looks like a duck and quacks like a duck, therefore it should be regulated like a duck (ie a standard telephone service). However, the court held that VoIP is an information service and consequently kept this relatively new industry within unregulated space citing the US congressional wishes to refrain from regulating the internet.

The US Federal Communications Commission Chairman Michael Powell announced in February 2004 that the FCC’s position was that VoIP services should be the subject of some regulation, especially universal service and emergency call services. The FCC enquiries continue whilst the US VoIP market remains in a state of confusion.

The US lawmakers are considering the “VOIP Regulatory Freedom Bill”. It has not yet come out of the Committee on Commerce, Science, and Transportation for a vote in the Congress.

The Bill contains provisions banning state governments from regulating or taxing VoIP. Connecting to the PSTN may require VoIP providers to adhere to the Communications Assistance for Law Enforcement Act (and assist with wiretaps). The Bill imposes a universal service levy that will go to providing discounted phone service to low income and rural Americans. The hearings into the bill have also touched on 911 services.

Canada

The Canadian experience departs from the US. Primus introduced a VoIP

service and Bell Canada filed a complaint with the Radio, Television & Telecommunications Commission. Bell Canada claimed the Primus service did not comply with relevant regulations including emergency call services and QoS obligations. The results of this are not yet complete but it appears that Canadian regulations focus on the service attributes rather than the technology (ie PSTN vs internet) and therefore it is likely VoIP will fall to be regulated in the same fashion as a standard telephone service.

The United Kingdom

In the United Kingdom, the *Communications Act, 2003* enacted EU Directives to implement a technology-agnostic electronic communications regime. VoIP is covered under that regime. Whether or not VoIP is regulated as publicly available telephone service depends on:

- If the service is a substitute for a traditional public telephone service;
- Would the customer think the service is a substitute for a public telephone service or would they use it as a first choice for an emergency call; or
- If the service is the only means for the customer to access the public network.

The VoIP service will be regulated if any of the above criteria are satisfied. There is an exception to regulation where the VoIP service is adjunct to the main service or offered as a secondary service.

REGULATION IN THE ASIA PACIFIC REGION

VoIP is likely to be specifically regulated in some manner throughout the Asian region once the market matures. Given that is the case, there are a number of common obligations that will apply to the VoIP provider. Below we outline some of the main regional developments regarding VoIP services.

India

The Telecom Regulatory Authority of India issued a regulation on QoS for VoIP in January 2004. India regulated

VoIP on a tier system that is:

- Toll Quality – which means the VoIP service must be comparable to landline services.
- Below Toll Quality – recognising that VoIP services are not perfect allowed a lower charge for services below toll quality.

South Korea

One factor that has led to South Korea's broadband popularity is a commitment to VoIP services where regulation allows resale of VoIP services to stimulate competition. South Korea originally offered free VoIP in order to capture market share although charges have now been implemented.

Foreign ownership restrictions have been completely removed, opening the VoIP services market further.

VoIP providers in South Korea are classified as special service providers (SSPs) when providing VoIP services via the public network and as value added service providers (VSPs) when providing PC-to-PC VoIP services.

In South Korea, a VoIP service provider must go through a process of notification (for VSPs) and registration (for SSPs). SSPs must also hold standard technology qualifications that demonstrate the technological capability for providing the VoIP service and also must prove financial viability before launching any VoIP service.

Singapore

Initially only SingTel could provide VoIP services within Singapore. The Singaporean telecommunications market was liberalised in April 2000 and a licence class called the "internet based voice and/or data service" was offered. Any organisation can provide VoIP services (or data services) provided they have this licence and abide by a minimal QoS benchmark.

In a now crowded Singaporean market for VoIP services, the national carrier SingTel has actively participated with two notable VoIP services. eVoiz allows SingTel customers to make a call from their PC to telephone subscribers in certain countries at a cheaper rate than the international direct dial. The

other service, V019, permits a telephone user to make an international call over a VoIP system by dialling a special prefix. The call cost for this service is a little higher than for eVoiz but the service operates from a normal telephone rather than from a computer.

China

In 1998 a Chinese appellate court ruled that offering VoIP services was not explicitly prohibited under existing Chinese administrative rules and regulations including the 1993 "Provisional Arrangement for the Approval and Regulation of Decentralised Telecommunication Services".

In 1999 the Ministry of Information Industry (MII) issued licences to government affiliated telecommunications companies, China Telecom, China Unicom and Jitong Communications to provide VoIP services.

Presently, China has established an IP telephony standards group addressing issues such as technology standards for VoIP services, support deployment of domestic IP telephony products and laws and regulations relating to IP telephony. Chinese VoIP operators can set their own tariffs without prior approval from MII.

Thailand

Thailand has two state owned telecommunications carriers, TOT Corporation which manages domestic voice communications and CAT Corporation which manages international voice and data communications. Thailand is still grappling over whether or not to regulate VoIP as a voice communication or a data communication. Both the CAT and the TOT have introduced VoIP services.

It is early days for VoIP regulation in Thailand. Interestingly in Thailand internet service provider concessionaires are prohibited from offering VoIP services and violators could face withdrawal of their concession. There are currently no QoS obligations enforced regarding VoIP latency and accessibility in Thailand.

Australia

Australian regulator, the Australian Communications Authority (ACA) is coming to terms with the growth of the VoIP market and plans to hold industry consultation into VoIP regulation during 2004 with regulations to be provided by mid-2005. What is clear already is that the ACA believe that VoIP should be regulated as a standard telephone service and not an information service specifically with regard to law enforcement and emergency call obligations.

The ACA issued a press release stating that they plan to amend the Australian Emergency Call Determination to make it clear that service providers will not face liability where a user is unable to make an emergency call due to circumstances beyond the control of the provider eg power outage. This assists VoIP providers as VoIP phones are powered from the mains and not the local exchange.

CONCLUSION

VoIP is a disruptive technology. It will definitely lead to lower call costs to consumers over time. Just how low and how quickly will depend to a large degree on the scope of regulation. What is clear is that VoIP is sufficiently different to the existing standard telephone service that it requires specific regulation. However, the regulation needs to be "soft-touch" so as to strike the balance between preserving important public policy and encouraging innovation.

In any event technology may overtake the whole regulatory process as peer-to-peer VoIP operations like Skype threaten to do to the telcos what Napster did to the record companies.

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What I Saw at the (Digital) Revolution

Edited address by Dawn Airey, Managing Director, Sky Networks to the Australian Broadcasting Authority's Conference held in Canberra in June 2004

INTRODUCTION

I have tremendous admiration for the Australian broadcasting sector.

Not least because a few years back, when I was working for one of the smaller terrestrial channels in the UK, we somehow managed to sneak up behind Britain's dominant commercial network and snatch from their grasp *Home and Away*, which was one of their most popular shows.

It was an audacious coup. Overnight, that single programme gave us a 10% uplift in audience share.

So God bless Kerry Stokes ... And if there's anyone from Grundy's in the audience I'd be happy to ear bash you about why it would be a good idea to wrest *Neighbours* off BBC1 and instead give it pride of place on Sky One.

BRITISH TELEVISION

Contrary to popular opinion, there is a great deal more to British television than wall-to-wall Australian soap operas.

The UK is a centre of excellence for film and production. The business of selling programmes and format rights to places like the United States and Australia is now a US\$1 billion industry¹. And it's a country that leads the world in digital television as well.

Whereas here the number of homes with digital television is running at around 10% (for free-to-air and pay-TV services combined); in the UK, with several years' head-start, the figure is 53%². In fact, take-up is now so rapid that analogue switch-off isn't a theoretical concept any more; it's under active consideration by the British Government.

It's also an environment:

- where there are no longer five free-to-air broadcasters, but more than 100;
- where some viewers have 400 channels from which to choose;

- where the majority watch digital not via cable or an aerial, but a satellite dish³;
- where audience fragmentation hasn't led to a decline in the quality of programming on the major networks – quite the reverse;
- and neither have advertising revenues for the free-to-air broadcasters diminished in the face of all this competition – actually, they're continuing to rise

It is a market whose overwhelming characteristics are freedom and choice rather than restrictive rules and spectrum scarcity.

Yet it is a market that many in Australia have been saying for years cannot possibly exist.

The idea of a liberalized broadcasting sector isn't merely an "untested economic experiment", as it has been described in some of the more extraordinary policy documents issued by the commercial broadcasters in this country.

In the UK it is a fact of life. And regardless of its impact on one network or another, it is the viewer who is the ultimate beneficiary of more television, more innovation, more channels and more choice than ever before.

BRITISH DIGITAL EXPERIENCE

Because digital television seems to mean different things in different parts of the world, let me set out my stall and explain what digital television actually means in the British experience and just how all-pervasive it has become. I also want to touch on the somewhat heretical idea that an increase in the number of commercial networks might not be such a bad idea after all.

My remarks come with a health warning, however. Far be it from me to advise you on how television here should develop. This is an exercise in trying to explain what Britain does now and how it got there. I am conscious of the difference in size and relative maturity of the two markets. For

example, not only is free-to-air broadcasting profitable in the UK, but subscription television is now making money, and there is no better-funded broadcaster in the entire world than the BBC.

In Australia the television license fee might have gone the way of flared jeans and gold medallions in the 1970s. But in the UK it is alive and well. The British government still feels it is its business to compel everybody with a television set to stump up the equivalent of AUD\$322 every year – whether they watch the BBC or not – with the consequence that the BBC wallows in what its incoming director-general once described as a "jacuzzi of cash".

So when digital television began in 1998, the BBC had already lined up a whole suite of additional channels aimed at individual demographics – from kids, to pre-schoolers, to 16-34s, and so on – and inveigled themselves onto all three platforms.

But digital only really took off when each platform recognised that it had to play to its own strengths.

DTT

Digital terrestrial television (DTT) began life as a government-sponsored exercise in trying to create a vehicle that could beat Sky at its own game.

When DTT originally launched back in 1998 it was as a pay TV model – which I understand at least one of the Australian commercial networks is currently arguing for – and it too was run by some of the biggest players in the commercial television sector.

Except that in the UK it was an unmitigated disaster. The network knew an awful lot about selling airtime; but it had no idea how to run a subscription television business. Neither did it help that the signal was so weak only half the country could get a picture. The smartcards could be hacked and they invested AUD\$1 billion in a package of lower league football matches that nobody wanted to watch.

One economist calculated it would have been cheaper to take their viewers to the actual game and put them up in five-star hotels than it was to televise each match.

When the liquidators were finally called in, all that remained of ONdigital (which had by then been renamed ITV Digital in the hope that some of the parent companies' magic might rub off) was a long line of angry creditors and a million former customers left staring at blank screens.

The ruins were then handed over to the BBC and the transmission company Crown Castle, and digital terrestrial evolved into a free-to-air service. It was only then that the platform finally took off.

Today DTT boxes receive around 30 or so free-to-air channels including all the mainstream networks and some of their subsidiary offerings as well as independent subscription-free channels such as Sky News and UK History.

The platform has more than three million customers (about a quarter of digital homes), which is in no small measure down to the marketing muscle of the BBC and the huge amounts of supposedly commercial-free airtime on the BBC's own channels that are devoted to telling viewers to go out and buy a box.

Incidentally, pay television has recently made its return to the digital terrestrial platform. But this service is far less ambitious than ITV Digital ever was, and the role of the platform in the British broadcasting ecology seems to be that of a nursery slope for those viewers who have never been exposed to real choice in broadcasting. Once they have it there is an expectation that at least a proportion will want to opt for a greater choice of channels and upgrade to the likes of Sky or cable.

Digital Cable

Digital cable, though, is the least popular of the three platforms – with around 2.4 million subscribers (an 18% share of total digital households).

The cable industry in Britain grew out of an attempt by the government of the day to break British Telecom's monopoly. This means that while in the United States the telephony offering is generally seen as an adjunct to the

bundle of TV channels, in the UK it is often cheap phone calls that are the lure. Log on to the consumer website of NTL and the home page doesn't entice you to buy a multi-channel television package but its broadband internet offering instead.

There is also the small matter of the huge bath these companies took after going on a major acquisition spree. They were left with enormous debts they were unable to service and had to undergo major restructuring at the hands of bondholders.

That said, cable was never the basket case that digital terrestrial was. In those areas of the country that are cabled up, the two major operators remain particularly strong. And in the broadband era, the so-called triple play of TV, internet and telephony holds an allure to many.

Digital Satellite

Finally, there is digital satellite, which grew out of Sky's old analogue business.

But the analogue satellite service plateaued at 3 million-3½ million subscribers and the whole platform needed a bit of a kick start. So the company took a digital course, resulting in a television platform with seven million consumers (about half the total number of digital homes and around a third of all homes in Britain).

Satellite offers viewers the widest viewing choice of any platform: some 400 channels. Most of these are what we understand as traditional TV channels. But, as with Foxtel Digital, there are timeshifted channels, multiplexed movie services (offering the same film with different start times); and there are 80 or so radio stations as well.

And unlike DTT and cable, satellite is also an open platform. That means that far from being a "gatekeeper" we're obliged to open up our service to all comers on "fair, reasonable and non-discriminatory terms". And that means a lot of those 400 channels exist outside Sky's retail offering. So, for an agreed price, any channel that meets basic taste and decency guidelines can broadcast to all those satellite homes. In a sense, it has democratized British broadcasting.

In the early days, such a sizeable offering was far beyond anybody's comprehension. This was a television service so vast that it was derided as being only for "*sad people who lived in a loft*"⁴. The argument went that most British viewers only ever had five channels, therefore they would be more at ease with the limited offering on DTT. People couldn't understand how anybody would navigate back and forth between hundreds of different channels.

Yet for millions of individuals, an Electronic Programme Guide is now an essential part of what television is. And viewers quickly grasped that with three competing platforms, it was now a buyers' market and the platform they wanted was the one that offered them the widest possible choice.

INTERACTIVITY

In the digital age there are also not only a multitude of things to watch, but different ways to watch them.

For instance, viewers tuning in to watch the day's play at Wimbledon don't have to wait for a highlights package to see what they missed. They're able to instantly choose between six live matches being played simultaneously on six different courts.

Some sports also offer a choice of camera angles. It's up to you whether you want to watch the Test Series from the batsman's end or square leg.

Traditional news and entertainment formats are also embracing interactivity in a big way. You can vote on the issue of the day or evict your least favourite contestant from the *Big Brother* house with a press of the red button on the remote control.

Or you can access services not necessarily allied to traditional television – what's known in the Australian parlance as "datacasting". You can do your banking, place a bet, chat to a friend, check the news headlines or access government information about pensions or health matters all through the set-top box (which is invariably hooked up to the phone line). And you don't necessarily need a separate licence to do it.

So, all in all, it's a compelling proposition and subscriber numbers continue to grow. As I mentioned, 53% of the

population already has some form of digital or another ... but that still means there's another 47% to play for.

And subscriptions to Sky Digital have by no means plateaued.

It is estimated that there are probably another 10 million households out there that will eventually opt for Sky or cable over Freeview⁵ and, if our success to date is anything to go by, I trust we will be on course to capture the lion's share.

INNOVATION

There is also the fact that Sky doesn't just drive round, install your box and dish and then wait for the money to roll in. If we can offer the widest choice of channels, why not a wide range of consumer technology as well?

Sky viewers can purchase extra set-top boxes, personal video recorders, and over the course of the next two years – because we've got the bandwidth to support it – they can pay to receive a package of movie channels broadcasting in high definition. This isn't a mandated HDTV system as is the case in the US or Australia. It's something that's evolved as the market has continued to mature.

And six years after the launch of our original digital offering, and with Freeview a robust presence, Sky is also about to launch a free-to-air service via satellite⁶.

It will enable those viewers who are thinking of going digital but don't yet want to opt to pay a monthly subscription to access some of the 200 free-to-air channels that are available. But when they want to upgrade, they'll be able to do so with a single call to our gently persuasive subscriber management centre.

PROGRAMMES, ADVERTISERS AND VIEWERS

But these are just the raw facts and figures. The move to digital in Britain is also changing what it means to be a broadcaster and is bringing about a shift change in the way the nation uses television. It's also posing some interesting questions for traditional commercial broadcasters – those wholly funded by advertising – as it is here.



Never mind for a minute that there are more than 100 new networks broadcasting on Foxtel.

Perceived threat to existing players

But I have to say I've been surprised by some of the arguments being trotted out in defence of the status quo. I'd like to take you through some of them. Like this one, for example:

"[Ending the moratorium on new commercial television licences has] the potential to jeopardize the high quality of Australian free-to-air television services."

Jeopardise the quality of the output? Or jeopardize commercial TV revenues?

I played a part in the launch of Britain's fifth terrestrial television network in 1997. Not only are the two commercial broadcasters that were there before Channel Five still in business; the launch of a new competitor forced them to pick up their game. So even in an age of 400 channels, ITV1 and Channel Four are still among the most-watched broadcasters in the country⁷.

Advertising revenues

"Experience in the US and the UK indicates that new free-to-air channels will not lead to an increase in free-to-air advertising revenue to offset their cost".

Now, it may be that in the week I've been out of the country some vast new parallel universe has suddenly materialized out of thin air – in which resides another UK, one with a crippled and consumptive commercial television sector. In the one I'm familiar with, TV ad revenues are still rising.

In the past ten years the number of channels has gone from about 40 to 400. And in that time spending on television advertising has risen by 57%. That's an extra AUD\$8½ billion – two-thirds of which has ended up in the pockets of the major networks.

The figures I've glanced at here paint a similarly rosy picture in relation to the Australian market. Over the past seven years or so, TV ad revenues have risen by a third. And you're ahead of the UK in that TV's share of total ad spend has risen as well despite there being that

many more places for clients to put their money (online, for example).

Some advertisers, though, don't want to reach all the people, they want to reach the right people, which is why over that same timeframe advertising revenues for multichannel and subscription services in the UK have risen five fold. Big advertisers are increasingly drawn to niche channels that appeal to certain demographics. Ford has sponsored the main soccer output on Sky Sports for all 12 years of the Premier League's existence because it knows it is reaching 16- to 34-year-old males.

The multichannel world is also attracting new advertisers to the medium who've never been able to use TV before because of the high cost of entry. I'll give you a simple example: golf.

Ten years ago 100% of all advertising for golf brands used to go to print. Today they're spending several million pounds with Sky Sports.

So not only is multichannel television attracting new advertisers, its winning share from other media as well.

So let's once and for all dispense with this argument that more free-to-air channels means less money for the networks. The more channels there are, the more money there is.

Where the networks are seeing a decline is in audience share.

So figure that one out: the fewer viewers they have, the more expensive their airtime gets. I have to say, though, there is an element of logic to this.

Sumner Redstone, the chairman of Viacom, argues that broadcast networks such as CBS are actually more valuable in the age of fragmentation. That's because they remain one of the few places that still deliver anything resembling a mass audience.

In the case of Britain's ITV, its share of advertising revenue has fallen much more slowly than its share of viewing. And because it still delivers a greater number of commercial impacts than anyone else, the cost of impacts has risen in absolute terms.

It's a line of reasoning that continues to have some sway with media buyers

and clients -- especially when it's put to them by sweet talking sales execs in sharp suits.

Anti-siphoning

But my all-time favourite argument against the introduction of greater competition in the broadcasting sphere is the following:

"Rare instances of conflict in broadcasting live sport do not justify the introduction of new channels".

Experience in this country brings into question the whole matter of anti-siphoning legislation, which unfairly favours one group of broadcasters over another.

Let me give you an idea of how proscriptive the Australian list⁸ is when you lay it alongside the equivalent list in Britain (euphemistically referred to as the "Crown Jewels" of British sport):

In the UK, only the Finals Weekend at Wimbledon is reserved solely for live broadcasting on the free-to-air. Here the whole tournament is reserved thanks to the anti-siphoning list. That's a total of 600 matches -- including singles, doubles, mixed doubles, seniors and juniors, of which only a limited number are ever going to be seen in their entirety. And, just to rub salt into the wound, not a single volley or ace in this whole sporting extravaganza is being played on Australian soil!

In the UK, the networks have no special privileges that allow them to snaffle up the Australian Open. The French Open isn't a listed event. Neither is the US Open. And while we're on the subject: neither is the US Masters golf, nor the Australian Masters⁹.

I now realize I'm verging on sacrilege here -- given that every sport is deemed to be of national importance to Australia. And I'm sure the free-to-air argue these are all sports at which Australian athletes are particularly adept. But if that's the logic behind it all, then what on earth is the English FA Cup Final doing on the list? Or the soccer World Cup -- neither of which is likely to have any Australian representation whatsoever.

The same arguments are trotted out again and again -- as they were when subscription sports channels launched in the UK.

I can remember the invective leveled against Sky when it won the rights to broadcast Premier League soccer. Newspaper editorials fulminated against these "ruthless buccaneers" who were robbing Britain's sporting heritage from the common people¹⁰. The poor and the elderly would be particularly disadvantaged because they would now have to pay for hundreds of hours of programming that they used to be able to watch for free.

Except back in the good old days neither the BBC nor ITV broadcast overseas cricket tours. Or other countries' domestic soccer tournaments. If two events clashed, one might be shown live and the other as highlights later on -- if you were lucky.

In 1989 there were 26 live soccer matches on ITV ... and 9½ on the BBC -- the half because the BBC bothered¹ to show only the second half of an England international against Greece.

This year there will have been more than 400 live soccer matches on Sky Sports alone and 36,000 hours of sport in total.

And, lo and behold, today there is more sport on free-to-air TV than ever before, largely as a consequence of terrestrial broadcasters responding to competitive pressure from Sky. A fortnight ago more than 40% of the TV schedules of the main terrestrial networks were devoted to sport, which delivers young, predominantly male viewers that attract advertisers and thus generate revenues.

I don't want to give you the impression that it's all beer and skittles. Take the European Cup soccer championships that were played in Portugal. In Germany, which is as soccer mad as the UK, the only games reserved for free-to-air viewing are (i) the opening match; (ii) games involving the home nation; (iii) the semi-finals; and (iv) the final (irrespective of whether the German team is involved)¹¹. In the UK, every match of the current tournament has to be shown on the national networks.

As any sportsman or woman will tell you: it's always tricky when the playing field has been tilted unfairly in one particular direction.

PVRs

Yet the changes in the ecology of

broadcasting that have occurred up to now represent only the first wave of the digital revolution.

The elephant in the living room, that we haven't spoken about yet, is the hard disk personal video recorder – devices like TiVo and Sky Plus. Like digital TV, these are products that are poised to transform television as we know it ... even in a country like Australia, which has a long-held reputation as one of the most enthusiastic adopters of new technology. If Nick Falloon, David Leckie and David Gyngell think the freeing up of spectrum is the rough end of the pineapple, wait until PVRs hit the Australian market.

The beauty of these devices is their simplicity. Sky Plus, for example, has the ability to record all your favourite shows at the touch of a button because it's integrated into the EPG. Call up the on-screen menu, find the programme you want to record and then press the little button marked 'R' on the remote control. That's it – and it is a massive consumer benefit in its own right. You can kiss goodbye the days of fiddling around looking for a spare videotape or trying to set the clock on the VCR.

And when finally you settle into the armchair in front of the telly, you then have before you a menu of shows that you can watch, pause, rewind or fast-forward when you want, in the order you want – instead of when the network says you have to. It's early days. This is a premium-priced product (unlike our basic boxes which we give away free) and we've only signed up 322,000 subscribers so far¹². But customer satisfaction is off the dial. Virtually everyone who's got one gives it a nine or a ten on a ten point scale¹³.

Even the critics can't fault it – which is no mean achievement for Sky. One magazine hailed Sky Plus as addictive as the mobile phone and the crack pipe. I still can't decide if that's a compliment or a cry for help.

And one of the most popular breakfast DJs in the country spent more than half an hour plugging Sky Plus on his show the other morning.

So consumers absolutely adore PVRs. It's a different story, however, for commercial networks that derive their income solely from advertising. Here's why:

Three quarters of Sky Plus subscribers say when that they're using the box, they don't watch any advertisements at all¹⁴. Three quarters of Sky Plus subscribers choose to flip past the ads because they now have the ability to do so.

There is an argument consumers have always been able to avoid the ads – by getting up to make a cup of tea or flicking channels. But never has the consumer had the ability to compress a commercial hour down to 45 minutes before. They now have the means to do so, and they are doing it – and it is this that poses a real challenge to advertiser-funded TV.

In Britain and on Madison Avenue, this is slowly dawning on the advertising industry's biggest brains and we're now working alongside agencies and media buyers to see whether this new world might still be able to work in their favour. These efforts are still in their infancy. But at the very least I would expect there will be some pressure on the regulators to relax some of the rules surrounding advertising and sponsorship that have existed for as long as commercial television has been around.

Over time we might see more advertiser-funded dramatic content. We might even be able to include brands in the context of a programme a little more unobtrusively than *Mornings with Kerri-Anne* and *Good Morning Australia* do at present.

In the United States J. Walter Thompson was able to arrange for Ford vehicles to be written into the script of the drama series *24*.

And viewers with PVRs were not able to skip the ads when they sat down to watch the show's season premiere because there weren't any. The episode, sponsored by Ford, ran commercial-free¹⁵.

Some other ideas being mooted in the UK include:

- a larger number of shorter commercial breaks;
- and stronger visual branding so that the viewer who fast-forwards through a commercial is still able to register the brand it is promoting

Interactive services have a role to play here as well. Some advertisers now

have what are called Dedicated Advertiser Locations (**DALS**). Click on the interactive icon during a particular commercial and you're transported to a separate site where you can learn more about that product's attributes or maybe enter a competition or send away for a brochure. That's real direct response TV.

That's not to say I believe network television is going to disappear all together. Here are what I think are the two most compelling statistics relating to PVRs:

- Even when viewers have the capacity to watch every single show off their Sky Plus hard drive, two-thirds of viewing is still live. People are always going to want shared viewing experiences. And some genres of programming only really work when you're able to view them in real time – such as the football or the news. So maybe ads in those types of shows might start attracting even higher premiums.
- The other fact is this. In Britain, the average number of hours of television viewing has been steadily declining. The ordinary household watches 23 hours of TV every week. But in Sky Plus households, when people can watch whatever they want at their own convenience, weekly viewing has risen to 27 hours a week. Not only that; more than half of them are watching a wider choice of channels than they did before.

CONCLUSION

So the digital revolution is causing us to fundamentally rethink what television is and what it means. Some of us in this room think that's a good thing. Others are quaking in their boots. And the rest are polishing their knuckledusters and their meat hooks in readiness for another lobbying round.

But how's this for a suggestion?

Rather than deciding the future of the Australian broadcasting landscape on the basis of who has the deepest pockets & the burliest director of public affairs, let's examine the merits of the arguments.

I hope I have been able to convince you that some of the opinions that pass for holy writ are not compelling.

Fifteen years ago Rupert Murdoch addressed the assembled British broadcasting establishment with a speech in Edinburgh¹⁶. He spoke of a coming broadcasting revolution that would:

“free television from the dominance of one narrow set of cultural values, freeing it for entry by any public or private enterprise that thinks it has something people might like to watch”.

As you might imagine, his remarks went down like a cup of cold sick.

In fact, I had my own little incident with Rupert not so long ago.

When I joined BSkyB from the world of free-to-air broadcasting I was asked if I'd go and have supper with the great man himself at his apartment in St James's which, if you know London, is probably the swankiest part of town – just a stone's throw from Buckingham Palace. (And I'll leave it to you to draw your own conclusions about which is the more influential address.)

It was supposed to be an informal, relaxed meeting. So of course I immediately raced out bought an entirely new outfit for the occasion including brand new shoes with smooth leather soles.

And the meeting went well ... until it came to say goodnight.

Instead of taking the lift back down to the ground floor I thought it would look rather glamorous to descend the magnificent spiral staircase, which looked like something out of an old Hollywood movie.

Big mistake.

As Rupert stood at the top of the stairs waving me off, my swanky new shoes with the leather soles made contact with the meticulously polished marble steps ... with the result that a second or two later there was a resounding thud – which was me falling flat on my backside. When I looked back up to where Rupert was standing, there he was, leaning over the banister, with a wry grin on his face. And with his characteristic sense of understatement he looked down and said: “You're not the first person to have done that”.

And he was right. If you haven't got your wits about you there's always a

chance you're going to end up flat on your backside.

The digital revolution and devices such as PVRs might represent a challenge to the commercial TV model as it exists today, but rather than stick their heads in the sand or place obstacles in the way of the industry's natural evolution it might be an idea to embrace change and start competing instead.

It took us a long time to learn that lesson in Britain, where one incumbent after the other successfully fought off competition for more than 60 years. In the 1940s and 50s powerful forces – including the likes of Winston Churchill – lined up to oppose the introduction of commercial television.

A former director-general of the BBC sorrowfully informed the House of Lords that:

“Somebody introduced smallpox, bubonic plague and the Black Death. Somebody is now minded to introduce sponsored television into this country”¹⁷.

But then when the ITV companies finally got their licences, they proceeded to behave in exactly the same fashion so as to preserve their monopoly on television advertising revenues. Britain had to wait until the 1980s for the launch of a second commercial channel ... and even then its hands were tied behind its back. Guess who was awarded the contract to sell their airtime and pocket most of that money as well? ITV.

Amazingly it happened all over again with the launch of pay TV. Again the franchise was awarded to some of the biggest existing terrestrial players.

Then along came Sky, which unlike cable and terrestrial, received no regulatory favours and had to stand or fall on the quality of its service alone.

In fact, the lack of government assistance to get it off the ground probably forced upon Sky its customer-focused mentality. As we have seen again and again over the years, where broadcasters rely not on competition but favours from the regulator they tend to develop a false sense of security.

And it's the great tragedy of British broadcasting that for 40 years ITV and BBC settled into a cosy duopoly that had the effect of acting as a brake on

innovation. With no real competition to speak of they missed opportunity after opportunity to promote new technology and build up an international business that could have truly rivaled the US production sector.

Competition is not easy, but it is essential. For competition to flourish, government and policy makers must create fair opportunities for all participants, and let the market do its work. There will be winners and there may even be some losers. But the ultimate beneficiary is always the same: the consumer.

The lesson of the British experience is that we have to let our actions be led by the viewers' needs rather than the desires of the regulator or one single sector of the industry. If we have the courage to make competition work, we will be well on the way to securing for the industry and its consumers, an extremely bright future indeed.

Dawn Airey is the Managing Director of Sky Networks.

¹ Total income from UK TV exports, 2003: US\$921m. Source: British Television Distributors' Association

² By 31 March 2004 UK digital TV penetration was estimated to have reached 53% of UK households, up from 50% at 31 December 2003. Source: Ofcom Digital Television Update

³ Total digital homes by platform as at end Q1 2003. Satellite 55% penetration; DTT 26.5%; cable 18.4%; ADSL 0.1%. Source: Ofcom Digital Television Update Q1 2004

⁴ Stephen Grabiner, Ondigital chief executive, as quoted by the Press Association, 28 July 1998

⁵ BSkyB presentation to Merrill Lynch TMT Conference, London, June 2004

⁶ BSkyB press release: 'BSkyB announces Free-To-Air and High Definition Television initiatives', 9 June 2004

⁷ 'Carlton Communications Plc/Granada Plc: report on the proposed merger', Competition Commission, 2003

⁸ Australian Broadcasting Services Act 1992, subsection 115(1); Broadcasting Services (Events) Notice (No.1) 2004

⁹ Appendix 1, ITC Code on Sports and Other Listed and Designated Events, revised January 2002

¹⁰ 'British Up in Arms over Murdoch's Hold on TV Sports', Associated Press, 24 January 1996

¹¹ Appendix 3, ITC Code on Sports and Other Listed and Designated Events, revised January 2002

¹² BSkyB Results, 12 May 2004

¹³ BSkyB presentation to Merrill Lynch TMT Conference, London, June 2004

¹⁴ Ibid.

¹⁵ 'Ads Fashioned to Fit TV Shows', Wall Street Journal, 3 March 2004

¹⁶ 'Freedom in Broadcasting', MacTaggart Lecture to the Edinburgh Television Festival, 25 August 1989

¹⁷ Lord Reith, House of Lords debate, 22 May 1952

DIGITAL TV: The Reviews

Whatever happened to the PC Report?

This edited address by Stuart Simson to the Network Insight Seminar in June 2004 discusses the Australian experience with digital television

So what did happen to the Productivity Commission report into the *Broadcasting Services Act*?

In a word nothing—and sadly our worst fears are coming to pass.

Four years ago the late Professor Richard Snape and I and the team at the Productivity Commission prepared the 500 page report for the Government. The scope of the public Inquiry was:

“to advise on practical courses to improve competition, efficiency and the interests of consumers in broadcasting services.”

We were asked to balance the social, cultural and economic dimensions of the public interest with regard to the impact of technological convergence on broadcasting markets.

THE PRODUCTIVITY COMMISSION REPORT

The report covered four main areas:

- the need for change
- opening up the broadcasting spectrum
- the issues of diversity, concentration and competition, and
- program content and standards.

A major focus of our enquiries was the digital revolution and specifically the government's digital broadcasting policy.

We concluded that rapid and certain conversion to digital television is the key to unlocking the spectrum. We said it will create opportunities for new players and new services. We said innovation should be embraced by:

- Setting a firm and final date of January 1 2009 for the analog switch-off;

- Providing for early digital conversion and release of spectrum; and
- Relaxing restrictions on digital services (that is datacasting and multi-channelling and picture formats.)
- And not mandating high definition transmission.

The report warned that “*without substantial changes, the digital conversion plan is at serious risk of failure.*”

Four years on from our report, and six years since the digital conversion legislation passed parliament, the market is telling us that the policy has comprehensively failed. A few hundred thousand digital conversions in the free-to-air space is absolute testimony to this.

To be precise 322,000 digital free to air (FTA) homes out of 7.2m TV households or 4.4 per cent. After taking account of households with multiple TV's the figure is barely two per cent.

And this is notwithstanding the fact that, according to the Department of Communications, Information Technology and the Arts (DCITA), 75 per cent of the population now has access to digital terrestrial services by all broadcasters in their license area. A further 10 to 15 per cent will have access to at least one digital service.

The subscription television sector has a strategy for digital conversion and it would seem within a defined time period of a few years. It has already signed over 400,000 digital customers - that is more customers in three months than has occurred in three and half years of FTA digital.

But I'm sorry the subscription television sector should not be the benchmark of digital broadcast policy. By definition consumers pay for subscription television. They get this service via either cable or satellite.

FTA digital on the other hand is transmitted via the digital terrestrial broadcast spectrum. This is a scarce public resource and should not be the exclusive preserve of vested interests. It should be “free” to Australians over and above of course the cost of a set-top-box.

THE IMPORTANCE OF DIGITAL TV

Why does digital TV matter to all Australians?

Because digital television can improve reception, enhance sound and picture quality, and provide more channels and new interactive services, as our report stated, the greatest benefit is this great public resource, the digital spectrum, can be freed to facilitate the introduction of new players and services.

In short we concluded that the switch to digital television is the most fundamental change in broadcasting since the introduction of television itself. In fact what we should have said is that it is *potentially* the most fundamental change because, as we sit here today, this magnificent opportunity is passing Australia by. This is a totally unacceptable situation.

The Government has not formally responded to the Commission's report and is never likely to, at least not in an overall sense. Some aspects have been addressed but this has been on a piecemeal and opportunistic basis as and when a review comes due, or when a change of policy is contemplated (for example, when foreign ownership and cross media rules were being reviewed).

To make the point there is no reference at all to our inquiry in the most recent DCITA discussion paper yet we considered the simulcast and multi-channelling in some detail.

A number of DCITA reviews are now under way—no less than 11 will be

conducted in 2004 and 2005. One is into the moratorium on issuing new commercial licences. Another major review is on the nature of simulcasting. By their very nature these reviews have had a history of considering particular issues in isolation from each other. This reflects the way these reviews are defined in the *Broadcasting Services Act*. Very constrained outcomes are the result.

Our report noted that broadcasting policy evolved in an era of distinct media that could be regulated separately. Indeed, broadcasting policy has been, and continues to be, characterised by highly prescriptive regulation. Such an approach was taken to the introduction of subscription television where legislation on the introduction of digital television mandates specific formats and services.

We argued that this approach reflects a history of political, technical, industrial, economic and social compromises. This legacy of quid pro quos has created a policy framework that is inward looking, anti-competitive and restrictive. Yet as boundaries between media dissolve and the old concept of broadcasting becomes obsolete, this regulatory framework is eroding and becoming circumvented.

The DCITA review process appears destined to perpetuate this failed legacy. To be fair, the invitation in the simulcasting discussion paper for participants to address other issues is welcomed but I wouldn't hold out much hope of the review taking a broad perspective.

There is certainly no scope for the across the board perspective we took in 2000 and which the Australian Competition & Consumer Commission (ACCC) tackled in its 2003 review, *Emerging Market Structures in the Communications Sector*.

For the record (and as recorded in the DCITA discussion paper) the ACCC also found that relaxing the prohibition on digital multi-channelling by FTA operators could heighten competition both between the existing FTA operators and pay TV sectors by creating scope for innovation and a wider variety of service offering.

The ACCC considered that broadcasters should have a choice about whether to multi-channel based on the benefits and costs of doing so. It concluded that no persuasive evidence had been presented that removing the prohibition on multi-channelling would harm the FTA sector.

The ability to unravel the quid pro quo legacy is severely constrained if a narrow focus is taken.

Our arguments seem as prescient today as they were in 2000. Broadcasting markets need to be opened up to encourage competition and innovation. Fewer restrictions should be placed on broadcasting and datacasting licences.

We suggested that, as spectrum became available, it should be sold for 'digital broadcasting' purposes (as distinct from 'broadcasting' or 'datacasting'). This would have allowed competition to emerge in the digital world, and would have by-passed all of the regulatory shackles applying to the existing broadcasting licences. As analog faded away, so too would the regulatory constraints.

We also said that HDTV should not be mandated, and multi-channelling should be allowed. All spectrum other than that used for a SDTV simulcast should be charged at market rates (instead of raising license fees of the commercial broadcasters based on revenues).

We also said that foreign ownership and the restrictions on issuing new broadcasting licences need to be axed before relaxing the cross media laws. We suggested a new media specific public interest test and a market for ideas.

THE DIGITAL TELEVISION DEBATE

Judging from the comments attributed to the incumbents in the DCITA discussion paper and press coverage of these reviews, the debate is still stuck in the quid pro mentality. The debate about ending the moratorium on new commercial licences focuses on whether we should allow a fourth commercial licences when it should be about unrestricted entry.

The concern of the incumbents and the champions of Australian content is that

further entry will fragment the industry and lead to lower quality production as ratings per channel decline. But who is to say that three or four commercial broadcasters are the 'right number.' An unrestricted market might only sustain three or four like broadcasters and that might be the end deal.

But we should let the market work this out. And why restrict others from offering different formats, including multi-channelling and so-called datacasting. New services might help to grow the market, but in different ways.

But nobody can argue that the existing policy is working.

The only substantial public policy argument in favour of regulating broadcasting is to address local content issues. Social objectives for local content need to be considered but possibly through more direct measures.

Trying to apply minimum content provisions to the myriad of new channels and formats that digital TV and other platforms, such as the internet and digital radio will allow, will hold back the reform of broadcasting.

We had suggested that a review of content policy be undertaken to develop policy instruments for the digital age, but that as long as analog was with us some minimum content rules might be needed to achieve social objectives.

The DCITA discussion paper on provision of services other than simulcasting states that the digital conversion framework aims to ensure that viewers continue to enjoy high quality television services throughout the digital conversion process and that the change-over to digital is undertaken with minimum disruption to viewers' enjoyment.

This is a highly revealing statement. First you will note it says nothing about giving any priority to making digital conversion actually happen. Second it smells of the quid pro quo legacy. And what does "minimum disruption" mean—well you can interpolate the "code" in that.

Finally, DCITA states:

"In undertaking these reviews, there is therefore a need to

carefully balance changes to improve the outcome of the framework with maintaining a stable environment for investment by industry and consumers."

Notwithstanding the above, the DCITA paper does make a number of important observations.

It states that evidence from Europe suggests that *"a very significant early driver for take-up of digital television is program choice."* DCITA refers to a report by a panel of representatives in 2001 that said FTA digital multi-channel services could be a key driver among those who do not want to pay additional costs (on top of the UK television fee).

On the requirement of FTA broadcasters to simultaneously transmit essentially the same analog and SDTV version of the same service, DCITA raises the question as to whether FTA broadcasters need to provide exactly the same version of the service in analog and digital mode.

But it then unfortunately puts forward a series of options that would be marginal at best in terms of driving content choice and innovation. And it ignores the really fundamental issue of when the government is going to bite the bullet and end the simulcast.

The bottom line is that (as DCITA notes) by broadcasting in digital mode the FTA broadcasters can theoretically provide two more digital "channels" within a 7 MHz spectrum allocation. The government made a full 7 MHz channel available to each of the five FTA networks, free of charge. This limited the spectrum available for new entrants wishing to provide new digital services.

We therefore concluded that the current policy framework does not address the three key issues of:

- Who will drive the conversion?
- How will analog switch-off happen?
- When will the analog switch-off happen?

All we know is that the duration of the simulcast is to be examined by a separate review to be conducted by January 1 2006.



And with the paltry take-up of digital FTA in Australia it is inevitable that, without major action, the simulcast date will be extended for years to come. Which, of course, will suit the incumbent commercial FTA's just fine.

So what needs to be done now?

The Government should relax restrictions on digital services (that is datacasting, multi-channelling and picture formats). For example the spectrum currently slotted to datacasting would be sufficient for two digital channels in major metropolitan markets.

But this will not in itself be enough to bring digital TV into the lounge rooms of Australians. And until this happens there will simply not be a workable advertising revenue model to support new programming.

The Government could also change the rules and let FTA's offer subscription multi-channels (although it should then relax the anti-siphoning regime on the pay TV sector) and thereby attract subscription revenues. But subscription

channels on FTA would only offer niche programming.

None of the above will deliver the critical mass or audience reach that advertisers will require.

Indeed even with big changes to the multi-channelling regime, datacasting and/or the introduction of new digital channels, and the drive that pay TV is giving take-up, I seriously doubt that digital penetration will reach 50 per cent of households on a five to 10 year time frame.

This means, in my view, the government should examine incentives to complete the transition. In its crudest form it should consider subsidising the take-up of digital set top boxes so that analog is switched off before the end of decade. This will not come cheaply—on various assumptions the cost would be around \$500m to ensure every household had at least one digital set top box.

There are numerous ways to skin this cat. But what is certain is that the policy is not working now, and will not work, in the absence of positive government

intervention into a market that is riddled with regulation and dominated by powerful vested interests.

Finally when we penned our report we were, for the reasons outlined above, under no illusions as to the obstacles to its acceptance. Informally, Richard Snape and I took the view that we needed to produce a report that would

have a relevance and shelf life for a number of years hence.

Well, perhaps for the moment it rests in peace with my fine and distinguished colleague.

But, the sheer enormity of the digital revolution will mean that one day, it will have its day.

Stuart Simson served as Associate Commissioner on the Productivity Commission Inquiry into Broadcasting. He is executive chairman of emitch Limited. The views expressed in this paper are his own.

Government Agencies and Regulators: Using Personal Information

Danet Khuth and Duncan Giles review the determination of the Office of the Federal Privacy Commissioner in Complaint Determinations No. 5 of 2004 and its potential impact in relation to the disclosure of information by government agencies.

A determination recently issued by the Office of the Federal Privacy Commissioner ('OFPC') has highlighted the need for Federal government agencies to carefully consider the best way to balance the competing obligations of protecting the privacy of their employees and customers and the need to cooperate and share information with regulators.

OVERVIEW

Complaint Determination No 5 of 2004 (Determination) involved a complaint lodged by an employee (**Complainant**) of the Australian Capital Territory Department of Justice and Community Safety ('JACS') under section 36 of the *Privacy Act 1988* (Cth) (**Privacy Act**). The Complainant alleged that JACS engaged in conduct constituting an interference with the Complainant's privacy by disclosing personal information about the Complainant to the Australian Capital Territory Ombudsman (**Ombudsman**) without proper authorisation under the Privacy Act. The Complainant sought a letter of apology from the JACS officer involved and financial compensation of \$20,000 for damages caused to the Complainant's reputation and the Complainant's employment opportunities in the public service.

The Privacy Commissioner found in favour of the Complainant and held that the disclosure by JACS of certain personal information about the Complainant to the Ombudsman

breached Information Privacy Principle ('IPP') 11. However, the Commissioner declined to grant the Complainant the \$20,000 compensation requested because the Complainant was not able to satisfactorily demonstrate that the Complainant had suffered the alleged damages.

THE FACTS

While employed by JACS, the Complainant made a public interest disclosure ('PID') to the Ombudsman alleging that JACS had failed to adequately enforce provisions of the *Liquor Act 1975* (ACT) in relation to offences concerning minors and associated issues of public safety. These allegations were similar to allegations that the Complainant had already raised internally with JACS.

In response, the Ombudsman's office wrote to JACS stating that the Ombudsman intended to investigate the Complainant's PID and requested JACS provide copies of any relevant information. In meeting this request, a JACS employee ('JACS Officer') spoke with the Ombudsman on two occasions. During the course of these conversations, the identity of the Complainant and a range of personal information about the Complainant, including employment related issues were revealed and file notes were made by the Ombudsman officers detailing these revelations. The Complainant eventually became aware of the file notes and made a complaint to the OFPC.

THE LAW

Federal government agencies are bound by the IPPs contained in section 14 of the Privacy Act, which provide the standards for handling personal information. This particular complaint raised the issue of whether there was an improper disclosure of personal information.

In general, IPP 11 prohibits agencies from disclosing information to a person, body or agency (other than the individual concerned) except under certain prescribed circumstances. JACS argued, among other things, that the disclosures it made about the Complainant fell within two exceptions under IPP 11, namely those provided under IPP 11.1(a) and IPP 11.1(d).

IPP 11.1(a) permits disclosure where the individual concerned is reasonably likely to have been aware that the information is of the kind that is usually passed to the agency (that is, the Ombudsman) and IPP 11.1(d) permits disclosure where it is required or authorised by or under law.

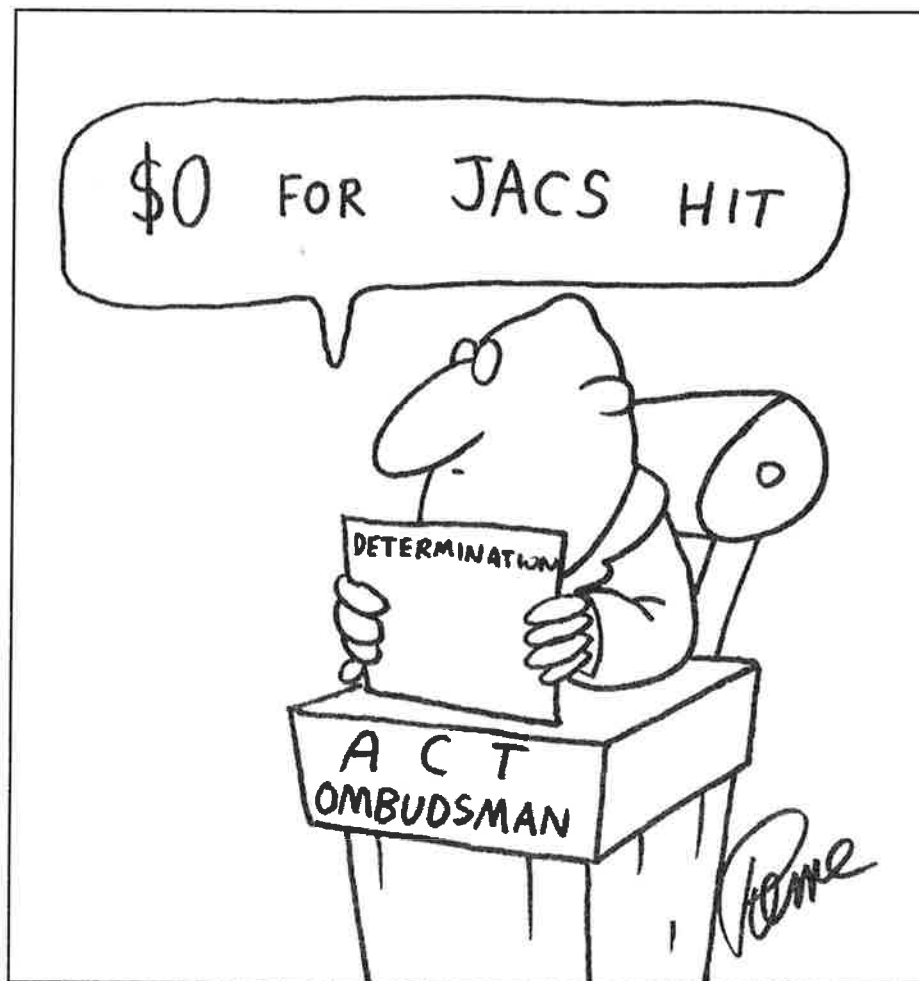
FINDINGS

The Commissioner observed that the JACS officer had disclosed to the Ombudsman that the Complainant had experienced work problems and had sought a voluntary redundancy without success. The JACS officer also disclosed personal information about the Complainant's racing industry activities and about the Complainant's requests to JACS for the Complainant to hold a bookmakers licence.

In deciding whether the above disclosure fell within the exceptions in IPP 11.1(a) or IPP 11.1(d), the Commissioner found that a reasonable person in the Complainant's position, that is an experienced employee of JACS with reasonable familiarity with grievance and investigation, would be 'reasonably likely to be aware' that IPP 11.1(a) did permit JACS to disclose personal information about the Complainant's identity and the fact that the Complainant had previously made the same complaints internally. However, the Commissioner found that the other information disclosed in relation to the disputes, grievances and complaints between the Complainant and JACS in relation to employment matters and the Complainant's bookmaking interests (**Additional Disclosures**) were not sanctioned by IPP 11.1(a) because they are not inherently related to the PID.

With respect to JACS' second contention that IPP 11.1(d) permitted its disclosure because they were of a kind 'required or authorised by law', JACS argued that the Additional Disclosure was needed in order to allow the Ombudsman to decide whether the PID made was frivolous, vexatious or not made in good faith. This would in turn assist the Ombudsman in deciding whether to proceed with the complaint. The Commissioner found that the authority for disclosure given by the relevant legislation is not unlimited but rather restricted by a test of relevance. The issue is whether the personal information disclosed by JACS went beyond what was relevant to the Ombudsman in deciding whether to proceed with the PID. The Commissioner reached the conclusion that the Additional Disclosures did not add to the question of whether the PID was made in bad faith and they went beyond the provision of personal information to the Ombudsman.

Hence, the Commissioner issued the Determination that the Additional Disclosures made by JACS to the Ombudsman interfered with the Complainant's privacy. He also declared that JACS should not repeat such conduct and should apologise to the Complainant for disclosing the Complainant's personal information.



In relation to the Complainant's request for compensation, Commissioner found that the disclosures did not occur outside the boundaries of the Ombudsman's investigating team and were not known more widely in the community. As a result, the Commissioner declined to make a declaration as to compensation because the Complainant did not satisfactorily demonstrate the Complainant suffered the alleged damages.

IMPLICATIONS OF THE DETERMINATION FOR PRIVACY IN GENERAL

From the perspective of federal government agencies, the decision emphasises that when an agency provides information about an employee or customer to satisfy the request of a regulator, it must carefully consider whether such disclosure is relevant and whether such disclosure is beyond the purpose for which the information was requested. Otherwise the agency may find itself liable for damages if it is found that the disclosure breached IPP 11.

For the individual whose information has been disclosed as part of a regulator's investigative functions, this Determination demonstrates the remedy available to them when such disclosures are found to be unauthorised. While in this particular case, the Commissioner had declined to make a declaration as to compensation, it follows that had the Complainant been able to show that he/she suffered injury to reputation and future employment opportunities as a result of the disclosures, the Commissioner may very well have awarded damages.

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