



Australian Government

**Department of Communications,
Information Technology and the Arts**

REVIEW OF THE REGULATION OF CONTENT DELIVERED OVER CONVERGENT DEVICES

APRIL 2006

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EXECUTIVE SUMMARY

Technological and market developments will facilitate access to essentially the same, media-rich content services through a variety of communications platforms, including premium rate services, proprietary content portals and the Internet.

Increasingly, consumers will expect to access audiovisual content, on the move and at any time, using convergent communications devices such as 3G mobile phones and hand-held computers. Platform-specific differences between content services are unlikely to be obvious.

Principles for regulating content

The *Broadcasting Services Act 1992* (BSA) sets the regulatory framework for broadcasting, datacasting and Internet content in Australia. It reflects a set of consistent policy principles and objectives, including:

- respect for community standards and the importance of protecting children from exposure to content that may be harmful to them
- assisting adults to make informed choices about the content they and their children view
- consistency between the regulation of conventional and new media
- stronger obligations should be imposed on service providers that have greater control over the content accessed on their networks
- wherever practicable, means for addressing complaints about inappropriate content should be established
- in establishing safe practices, education is a necessary corollary to regulation
- regulation should not impose unnecessary financial and administrative burdens on industry; should encourage the development of communications technologies and their take-up in Australia and should readily accommodate technological change.

The relevance of these principles and objectives is undiminished in a convergent environment. A co-regulatory framework for content delivered over convergent devices (convergent content) should be established with industry codes of practice underpinned by legislative requirements. This would be consistent with the approach established by the BSA.

Where carriage service providers (CSPs) offer content services over which they have either direct control (branded content on their portal), or contractual control (such as third party content made available on a revenue share basis), there is a clear role for obligations that would require pre-assessment of content, consumer information and complaints handling.

A new framework for convergent content

Regulation based on the level of control exercised by service providers rather than the communications delivery platform is likely to be more robust and adaptable in the

face of new and innovative content services. At the same time, an objective should be to harmonise the regulation of communications content and to reduce the complexity encountered by consumers, industry and regulators.

Consumers will benefit from clear and uniform information about content across delivery platforms. The broad definitions of classifiable material under the national classification scheme apply to such material stored on a device for commercial delivery, and this is likely to include convergent devices.

Strict application of the national classification scheme, including pre-classification of all content would not be practicable in the case of convergent content, for reasons including: the dynamic nature of the material; the number of items likely to be involved; their time-specific value; and rapid refreshment rate.

An adapted model, aligned with the national classification scheme, should be developed to assess convergent content. Content which is likely to meet the classifiable elements associated with restricted categories under the scheme should be so assessed and subject to restricted access systems. Content meeting the classifiable elements for prohibited content should be prohibited from delivery over convergent devices. Mobile CSPs and content providers should be severally responsible for meeting these obligations.

Persons making assessments about content under this model should be trained by the Office of Film and Literature Classification (OFLC) and undertake periodic refresher courses. Procedures should also be developed so that classification assessments are appropriately and accurately applied.

Where films and computer games have already been classified under the national classification scheme, industry assessments may not be required provided that classification information is presented fully. Only material formally classified by the Classification Board should carry the classification categories, symbols and determined markings.

The framework for regulating broadcasting services under the BSA also provides an appropriate mechanism for the assessment of content and the development of consumer information. Industry assessments may not be required for television programs delivered to convergent devices if they have been pre-assessed by broadcasters.

Where a television channel that is subject to the BSA is made available to convergent devices, access restrictions under the BSA—including time zones, if any—would apply. In the event, however, that a program was delivered to convergent devices independently of a broadcasting service, it would be required to meet the access restrictions of the convergent content framework.

Ephemeral content

The overwhelming focus of content regulation in Australia is currently on stored content. However, ephemeral content services, such as chat rooms, are likely to become mainstream commercial offerings in the mobile environment. It would be inappropriate to regulate such services as though they were niche services. Instead, regulation should be aligned as much as possible with that for stored content.

An assessment model for ephemeral content services should be developed that, by reference to the classification categories of the national classification scheme, provides consumers with information about the strength and nature of content to which they or their families are likely to be exposed.

Telephone sex and premium rate services should be brought into the regulatory framework for convergent content. The rationale for regulating these services separately under telecommunications legislation has been that they are delivered specifically to telephone handsets. This distinction will be broken down in a convergent environment leaving no compelling reason to retain a separate regulatory framework.

Complaints handling processes should be established which identify the mobile CSP as the first point of complaint with escalated complaints to be decided by the Australian Communications and Media Authority (ACMA). In assessing complaints about ephemeral services, it would be preferable that procedures not require interaction with the service either by employees of the service provider or the regulator. An appropriate storage requirement should be determined by ACMA and imposed on mobile CSPs to enable establishment of a complaints handling scheme.

Child safety

In a dynamic communications environment it is likely that services will be developed that may give rise to concerns about child safety. Recognising the potential for telecommunications networks to provide means for the exploitation of children, Australian criminal law was recently updated to provide that such behaviour is a criminal offence.

ACMA should continue to work with appropriate law enforcement agencies to ensure that consultative mechanisms are developed and/or maintained to facilitate exchange of information between CSPs and law enforcement agencies.

There are grounds for concern that mobile chat and other interactive services will potentially lead to inappropriate contact, especially with children. However, there are also significant countervailing factors that, utilised correctly, mitigate that concern.

Where mobile CSPs and content service providers offer chat services commercially, they should be required to ensure that safety measures are in place that are appropriate to the risk associated with the particular service.

Industry players are best placed to anticipate rapidly developing service offerings and to understand their commercial and network structures. Regulation should, therefore,

allow CSPs and content service providers the flexibility to determine the combination of ACMA-approved safety measures that will be most effective with respect to their operations.

In the modern communications environment, safety measures are likely to be most effective when applied in combination.

Technical and other safety measures are unlikely to be effective without ongoing consumer education focussed on the rapidly developing capabilities of convergent devices. Specific initiatives should be developed to raise awareness of potential safety issues in the convergent environment.

Consumer-initiated location-based services on mobile devices, also known as active location-based services, use network information to locate businesses or services near to the user. These services may be commercially popular and, because they are delivered at the request of consumers, are unlikely to raise issues of public concern.

Location-based services which allow the tracking of a user's handset without their knowledge or consent, are known as passive location-based services. There are grounds for concern that passive location-based services, if offered without appropriate safeguards, could be misused for illegal or inappropriate purposes.

The existing legal obligations of Australian mobile CSPs for the privacy of their subscribers would have implications for any passive location-based services. These obligations may not provide sufficient safeguards to prevent abuse of passive location-based services and it would therefore be appropriate to require the consent of an account holder prior to the use of location information relating to any handsets operated under an account. At a minimum, however, additional safeguards in relation to the use of passive location-based services that could be used to locate minors would be required.

Internet content

Where they provide access to the open Internet, mobile CSPs have no more control over the content accessed by consumers than traditional Internet service providers (ISPs). They are regulated by the online content scheme established by the BSA which includes, amongst other things, obligations with respect to under-age account holders.

Mobile CSPs should meet their obligations under the online content scheme when making Internet access available to pre-paid customers. This issue may need to be monitored by ACMA and considered in future Internet Industry Association (IIA) code review processes.

Another requirement of the online content scheme is that ISPs offer content filters to consumers for installation on their computer on a cost-price basis. Content filters, whether at the ISP or device-level, are currently not commercially available for mobile Internet access.

Given sufficient demand, there may be rapid advances in the development of mobile filter products. It is likely, however, that ISP-level filters will be available in advance of device-based products.

The costs to the mobile industry of mandated ISP-level filtering are yet to be established. Moreover, the effectiveness of ISP-level mobile filters would need to be demonstrated. At an appropriate time in the development of mobile filters, ACMA and the mobile CSPs should undertake work on these issues.

Filter products are just one of a range of tools that may assist consumers manage their Internet experience and that of their families. An alternative approach to providing community safeguards pending development of filter products is necessary.

The online content scheme should be amended to provide ACMA with the flexibility to exempt ISPs from filtering requirements in circumstances where the development of filter technologies lags behind new devices and operating systems that enable Internet access. ACMA may only provide such exemptions if satisfied CSPs have implemented sufficient non-filtering based community safeguards.

ACMA should monitor relevant filter technology developments. At such time as content filters are commercially available, ACMA should remove the exemption from filtering requirements for the relevant access technology so that the existing filtering requirements of the online content scheme apply.

In the meantime, there would be a code requirement imposed on CSPs to ensure that consumers purchasing Internet enabled devices or Internet access services for which content filters are not available are advised of that fact and offered the option of selecting another device or barring Internet access.

KEY ACRONYMS USED IN THIS DOCUMENT

2G	second generation
2.5G	interim cellular technology, between second and third generation
3G	third generation
ABA	Australian Broadcasting Authority
ACA	Australian Communications Authority
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ADMA	Australian Direct Marketing Association
AFP	Australian Federal Police
AMTA	Australian Mobile Telecommunications Association
BSA	<i>Broadcasting Services Act 1992</i>
CDMA	code division multiple access
CSP	carriage service provider
DCITA	Department of Communications, Information Technology and the Arts
GPRS	general packet radio service
GSM	global system for mobile communication
ICH	Internet content host
IIA	Internet Industry Association
ISP	Internet service provider
IP	Internet protocol
ITU	International Telecommunications Union
kbps	kilobits per second
Mbps	megabits per seconds
MMS	multimedia message service
MNO	mobile network operator
MVNO	mobile virtual network operator
OFLC	Office of Film and Literature Classification
PC	personal computer
SMS	short message service
TCPSSA	<i>Telecommunications (Consumer Protection and Service Standards) Act 1999</i>
TIO	Telecommunications Industry Ombudsman
TISSC	Telephone Information Services Standards Council
UMTS	universal mobile telecommunications system/service
WAP	wireless application protocol
WCDMA	wideband code division multiple access
WLAN	wireless local area network
WiFi	wireless fidelity
WMAN	wireless metropolitan area network
VOIP	voice over Internet protocol

INTRODUCTION

For the purposes of this review, the term ‘convergent devices’ is used to mean mobile phones and other mobile communications devices that can act as multimedia platforms and, in particular, deliver audiovisual content. The rapidly developing capabilities of these devices can be expected to bring substantial benefits including improved services for users and new business opportunities for content and service providers.

At the same time, the capabilities of such devices raise a range of issues for governments, regulators, the communications industry and consumers. Policy and regulatory arrangements exist for the management of potentially offensive or harmful content over other media, such as broadcasting platforms, the fixed Internet and interactive games. The review has considered the extent to which these arrangements are appropriate or applicable to new and emerging devices, which are distinguished by their mobility and their potential to cross traditional media, and therefore regulatory, boundaries.

1 BACKGROUND

On 13 May 2004, the then Minister for Communications, Information Technology and the Arts tabled the *Report of the Review of the Operation of Schedule 5 to the Broadcasting Services Act 1992* (Schedule 5 review). This review evaluated the Australian Government’s online content scheme, which is enacted through Schedule 5 to the *Broadcasting Services Act 1992* (BSA).

One of the issues considered by the Schedule 5 review was the impact that convergent devices may have on the operation of the online content scheme. The Schedule 5 review found that:

...there is a need to ensure that appropriate protections are in place for end-users, especially children who may access this audiovisual content as it becomes available on convergent devices.¹

Further, the Schedule 5 review noted that:

In the short-term, these protections may be achieved in relation to content delivered on SMS and MMS through service provider rules imposed under the Telecommunications Act 1997. In the longer term, a review should consider whether future regulatory arrangements are required and take into account the nature of these and other new and emerging services.²

To address this in the short-term, also on 13 May 2004, the Minister directed the Australian Communications Authority (ACA) to establish controls on access to adult content supplied via mobile phones, whether that content was supplied by premium

¹ DCITA, *Report of the Review of the Operation of Schedule 5 to the Broadcasting Services Act 1992*, DCITA, Canberra, 2004, p. 42.

² Ibid.

rate SMS and MMS or on proprietary network content portals.³ The ACA made the *Telecommunications Service Provider (Mobile Premium Services) Determination (No. 1) 2005* to establish these rules on 29 June 2005.⁴ This measure is serving as an interim arrangement, pending the conduct of a review by DCITA into a longer-term regulatory approach.

The information in this report is current as at December 2005.

³ ACA (Service Provider Determination) Direction 2004 (No 2), clause 4.

⁴ Further information about the service provider determination can be found at www.acma.gov.au/ACMAINTER.1900860:STANDARD:453308348:pc=PC_2547, viewed 6 July 2005.

2 PROCESS

2.1 The review and consultancy

On 15 July 2004, the then Minister announced the terms of reference for the Review of the Regulation of Content delivered over Convergent Communications Devices (the review). The Minister had previously announced the conduct of the review on 13 May 2004, when releasing the findings of the Schedule 5 review. Also on 15 July, DCITA issued a call for submissions document, which outlined the issues for consideration and noted the terms of reference for the review. The call for submissions document and terms of reference are at Attachment A to this report.

In view of the inter-agency impact of convergent devices, DCITA, together with the then regulators, the ACA and the Australian Broadcasting Authority (ABA), jointly sought the services of a consultant to provide technical and commercial advice on issues associated with the regulation of audiovisual content in this industry sector. Network Strategies Limited was engaged to undertake the consultancy.

The review has also been informed by submissions received from industry, community groups and other interested parties. Nineteen submissions were received and are listed at Attachment B to this report. The review has further been informed by industry consultations, including consultation with representatives of industry sectors that did not submit to the review. A list of organisations consulted is at Attachment C.

2.2 Other processes

The ACA released a draft service provider determination for public comment on 18 December 2004. Submissions to the ACA on the draft determination often dealt with similar issues to those of the review. As a consequence, where relevant, submissions to the ACA were considered by the review. The ACA made the final service provider determination on 29 June 2005.⁵

Concomitant to the conduct of the review, the Internet Industry Association (IIA), which represents Internet service providers (ISPs) and Internet content hosts (ICHs), was reviewing its codes of practice to take account of the findings of the Schedule 5 review. The IIA codes were registered by the ABA pursuant to clause 62 of Schedule 5 to the BSA.

In recognition of the growth of the use of convergent devices, the IIA, in conjunction with the mobile carriage service providers (CSPs), incorporated provisions in its Content Code 2 that would apply exclusively to proprietary content portals provided by mobile CSPs who are IIA members. The revised IIA codes of practice were registered by the then ABA on 26 May 2005.⁶

⁵ The determination, explanatory statement and accompanying media release and report on consultation are available at www.acma.gov.au/ACMAINTER.1900860:STANDARD:453308348:pc=PC_2547, viewed 6 July 2005.

⁶ The IIA codes are available at www.iiia.net.au/codes.html, viewed 9 June 2005.

3 THE REPORT

This report presents the findings of the review. The first part of the report provides an audit of technical and commercial factors that are involved in the delivery of audiovisual content services to convergent devices. It maps the delivery of content from the content provider to the user, by auditing the existing networks, devices, services, and means of delivery that comprise the market at the current time.

While some sections of this part note possible future developments, such as the introduction of location-based services and future cellular and non-cellular networks, it is an audit and does not attempt to predict the future precisely. Rather, it provides an overview of developments to date, which suggests that this sector will continue to be a dynamic and rapidly evolving part of the Australian economy. The first part of the report addresses terms of reference one, two and three.

In accordance with the terms of reference for the review, the second part of the report considers existing approaches to the regulation of content services in Australia. These include frameworks under communications legislation and the relevant legislative measures to address issues including criminal behaviour, privacy and content classification. This part also notes overseas developments in relation to content regulation for convergent devices.

The third and final part of the report identifies policy issues raised by audiovisual content delivered over convergent devices (convergent content). It then proposes a new legislative framework for convergent content, associated regulatory changes, and other, non-regulatory measures.

The second and third parts of the report address terms of reference four and five, and are underpinned by consideration of the factors cited in term of reference six.

TECHNICAL AND COMMERCIAL STRUCTURES

4 WIRELESS NETWORKS

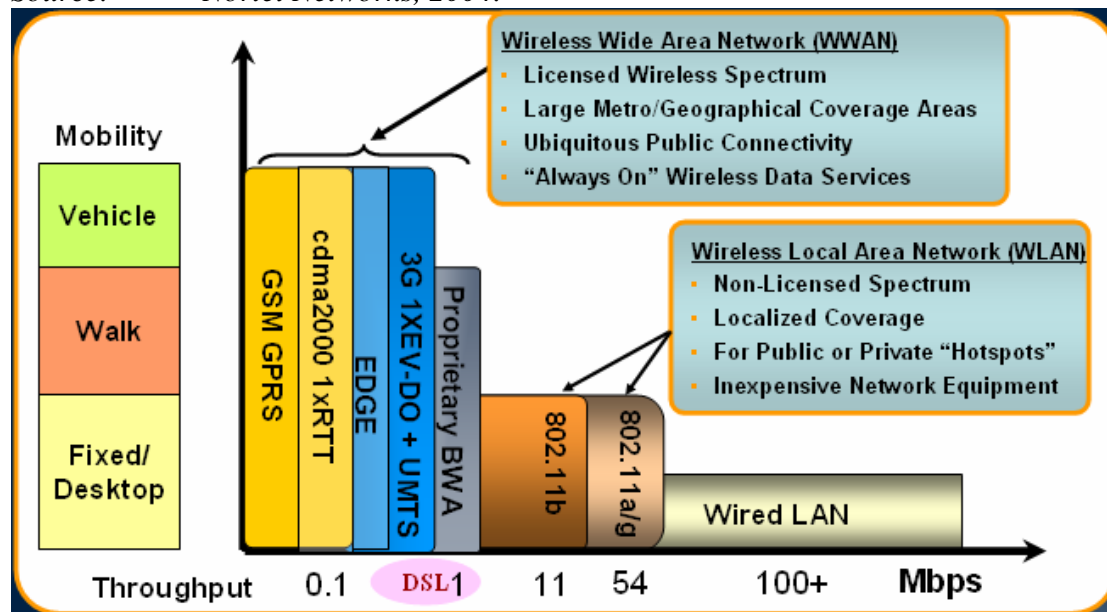
The wireless networks that currently and potentially provide access to convergent content are varied. Broadly, they can be divided between cellular networks, that traditionally have provided voice calls to mobile phones, but increasingly provide data to a range of devices; and non-cellular networks, such as wireless local area networks (WLANs), broadcasting networks and Bluetooth technologies.

The key difference between cellular and non-cellular wireless networks is that the former optimise mobility while the latter optimise speed. Figure 4.1 below shows the functionality of wireless networks currently operating in Australia by reference to mobility and bit rate. In this diagram ‘throughput’ refers to bit rate.⁷

Cellular networks consist of a series of interlocking cells, each served by a transmitter. Network users can move seamlessly between cells as the connection is ‘handed-off’ from one transmitter to another. By comparison, non-cellular networks, which offer a higher bit rate, offer only limited mobility to consumers. While cellular and non-cellular wireless networks have developed independently of each other, they are expected to be increasingly seen by consumers as complementary technologies.

Figure 4.1: Mobility and speed of networks

Source: Nortel Networks, 2004.



⁷ GSM, GPRS, CDMA, 1xRTT, EDGE, 1xEV-DO and UMTS are cellular technologies, Proprietary BWA (Broadband Wireless Access, such as Arraycomm and Navini) and 802.11 (WLAN) are non-cellular networks. See the following sections for further information.

4.1 Cellular networks

Cellular networks developed to provide mobile access to telephony services. As a result, they have to date provided relatively slow data speeds, but high mobility. The technical development of these networks has led to vastly improved bit rates, leading to an increasing ability to access data services in addition to more familiar voice communications.

Two key technologies underpin cellular networks worldwide:

- global system for mobile communications (GSM) which began as a European standard, but has been adopted in most of the world; and
- code division multiple access (CDMA) which is dominant in the United States, but has been installed in many other markets, partly because of its ability to provide coverage of large geographic areas from a single cell.

Both GSM and CDMA based networks are on stages of an evolving technological path where bit rate, clarity of signal and the range of services that can be offered are being increased incrementally. GSM and CDMA are so-called ‘second generation’ (2G) cellular networks.

To date, the evolutionary path for cellular networks has been:

- first generation (1G) analogue networks (now superseded) that were limited to voice communications;
- second generation digital networks that can carry limited data in addition to voice;
- upgraded 2G networks, known as 2.5G, that have increasing data capacity; and
- third generation (3G) digital networks that have the ability to carry advanced audiovisual content, including video calls.

The data capability of 2G networks is limited to SMS to deliver short text messages and the wireless application protocol (WAP), which enables limited ‘browsing’ of data. SMS is now a ubiquitous and powerful medium for delivering content and providing communications services. While it is still largely a text-based messaging system, premium rate SMS services that can enable access to audiovisual content are becoming increasingly popular. These services are discussed at section 6.1.

WAP over 2G networks allowed the first Internet access over mobile handsets. As a consumer experience, however, it was slow, cumbersome and offered access to only simple content. WAP over 2G networks is being superseded worldwide.

The introduction of 2.5G networks has been accompanied by the availability of handset features such as colour screens, higher quality audio and inbuilt cameras. 2.5G networks allow packet-switched Internet protocol (IP)-based data transmission and always-on connectivity. They also provide bit rates equivalent to fixed dial-up Internet connections. Network Strategies, for example, quoted speeds of between 20 and 40 kbps as typical for 2.5G GSM networks, known as general packet radio service (GPRS); and 72 kbps for 2.5G CDMA 1 x radio transmission technology

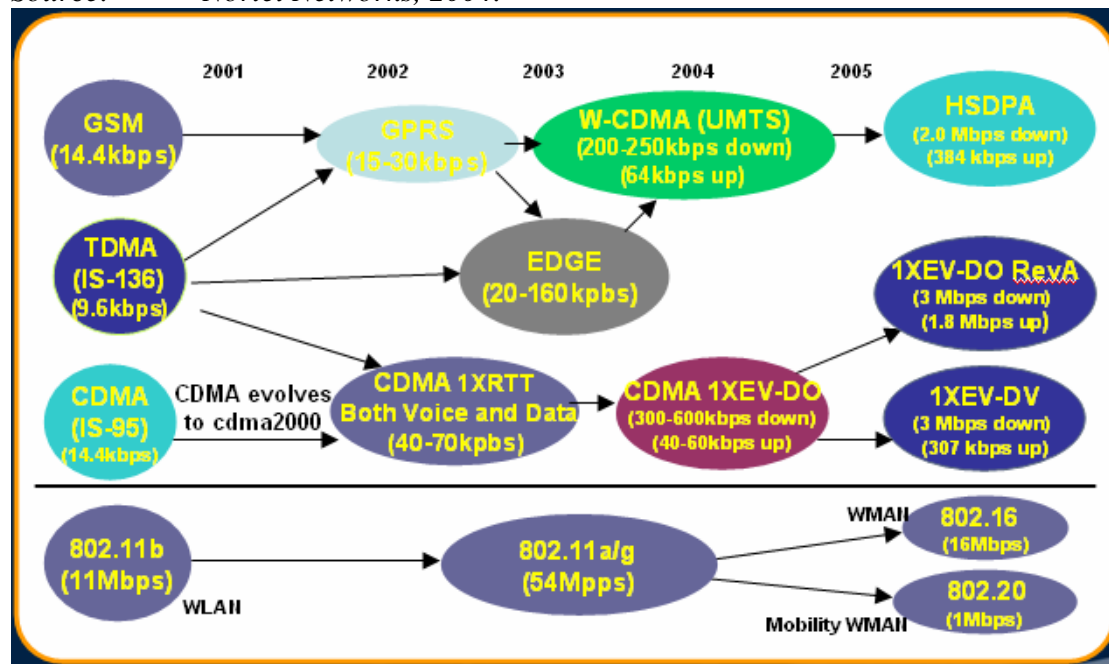
(1xRTT), while noting theoretical speeds of up to 114 kbps for CDMA 1xRTT.⁸ As a result, 2.5G data services are a more satisfying user experience than their 2G predecessors. 2.5G networks allow users to access MMS and transmit audiovisual content, including images captured by a device's inbuilt digital camera.

3G networks are the next stage of cellular network development. 3G allows streamed audio and video, broadband bit rates, and video calling. There has been heavy investment in 3G infrastructure worldwide, largely because of the potential to expand the revenue base of telecommunications carriers beyond voice calls. According to the then ACA, the costs of 3G licences in Australia alone totalled \$1.169 billion, and IBISWorld estimated investment in new networks by the Australian carriers to be \$8 billion (including licence costs).⁹

The technical progression to 3G networks for both GSM and CDMA networks is provided at figure 4.2,¹⁰ and explained in Box 4.1 below.

Figure 4.2: Evolution of wireless network services

Source: Nortel Networks, 2004.



⁸ Network Strategies Limited, *Final Report to the Australian Broadcasting Authority: New Mobile Services*, Network Strategies, Melbourne, 2004, p 12.

⁹ Both cited in Allen Consulting Group, *Mobile Telecommunications Industry: Economic Significance 2003*, Allen Consulting Group, Sydney, 2003, p. 40 and 38.

¹⁰ Figure 4.2 also provides the evolution of WLAN networks for information.

Box 4.1: Cellular evolution

GSM

At the end of 2004, GSM-based networks were offered by 626 operators by almost 200 countries with an estimated worldwide subscriber base of 1.27 billion.¹¹

2G GSM networks are upgraded with GPRS to 2.5G, which provides a bit rate of between 20 and 40 kbps. GPRS allows browsing for Internet content and MMS.¹²

GPRS networks can be further upgraded by the deployment of EDGE (enhanced data for global evolution); a technology developed by Ericsson that offers significantly higher bit rate and increased network performance. Nortel Networks considers that EDGE has a bit rate of between 20 and 160 kbps.¹³

The 3G standard for GSM networks is wideband CDMA (WCDMA), sometimes known as UMTS (universal mobile telecommunications system/service). The bit rate for WCDMA/UMTS is up to 2Mbps. The UMTS Forum has indicated that at the beginning of 2005 over 60 WCDMA networks were commercially operating worldwide, with over 16 million subscribers.¹⁴

UMTS/WCDMA networks may in the future be upgraded to even higher bit rates through the roll-out of High-Speed Data Packet Access (HSDPA, see 4.1.2 below).

CDMA

Developed by Qualcomm, CDMA achieves greater coverage from a single cell. It is therefore ideal for use over large geographical areas. While it is dominant in the US, CDMA networks exist elsewhere including Australia. The CDMA Development Group estimated that there were 240.2 million CDMA subscribers worldwide to December 2004.¹⁵

2G CDMA networks can be upgraded using CDMA2000 1xRTT (1 x 1.25MHz channel, radio transmission technology), which enables peak bit rates of up to 144 kbps, with an average bit rate of between 50 and 70 kbps.

The 3G Standard for CDMA networks is CDMA2000 1xEV-DO (evolution- data only), to be followed by 1xEV-DV (evolution- data and voice, see below at 4.1.2). The number of CDMA 2.5 and 3G subscribers worldwide was reported at 146.8 million to December 2004.¹⁶

¹¹ GSM Association, *GSM Statistics December 2004*, www.gsmworld.com/news/statistics/index.shtml, viewed 15 April 2005.

¹² Network Strategies Limited, *op cit.*, p. 11.

¹³ See Figure 4.2 above. For further details on EDGE, see Ericsson AB, *White Paper - EDGE: Introduction of high-speed data in GSM/GPRS networks*, Sweden, 2003.

¹⁴ UMTS Forum, *3G/UMTS subscribers hit 16 million, confirms UMTS Forum*, press release, 5 January 2005, www.umts-forum.org/servlet/dycon/ztumts/umts/Live/en/umts/News_PR_Article050105, viewed 15 April 2005.

¹⁵ www.cdg.org/worldwide/cdma_world_subscriber.asp, viewed 15 April 2005.

¹⁶ *Ibid.*

4.1.2 Beyond 3G: HSDPA and EV-DV

The future development in cellular technology (sometimes referred to as 3.5G and noted in figure 4.2) is the transition from UMTS/WCDMA to HSDPA and EV-DO to EV-DV. HSDPA is quoted as increasing UMTS/WCDMA capacity by up to 100 per cent and significantly increasing speed for data.¹⁷

EV-DV will converge voice and data into packetised delivery and will separate the upload and download of data into different streams. These developments are claimed to lead to a bit rate four times that of EV-DO, and will allow simultaneous voice and data delivery.¹⁸ EV-DV is expected to be commercially available in 2005.¹⁹

4.1.3 Australian market

Australia has four mobile network operators (MNOs)—Telstra, Optus, Vodafone and Hutchison—and a number of mobile virtual network operators (MVNOs) such as Virgin Mobile, which uses a segment of the Optus GPRS network. According to company reports, at December 2004, there were a total of 17.6 million mobile subscriptions and population penetration of approximately 87 per cent.²⁰

GSM networks are dominant in Australia and cover the major population centres.²¹ According to the MNOs, Telstra and Optus provide 95 per cent population coverage while Vodafone offers 93 per cent.²² All three GSM networks have had GPRS rolled out across them.²³

Telstra introduced a CDMA network in 2000, largely to replace the analogue 1G network in regional areas. It currently covers 98.3 per cent of the Australian population and 1.5 million square km.²⁴ It has been upgraded to 1xRTT. Hutchison also runs a CDMA network in Australia under the Orange brand, which covers

¹⁷ See D Pagnac, 'Denis Pagnac asks whether HSDPA will be the mobile turbocharger of the future' *telecoms.com*, 30 November 2004
www.telecoms.com/marlin/30000000461/ARTICLEVIEW/mp_channelid/30000000378?1=1&Marlinsource=V2autoMatt&ST=OEM&mp_pubcode=EO&mp_articleid=20017293304, viewed 2 December 2004.

¹⁸ Motorola *Technical Overview of 1xEV-DV*, white paper, 9 June 2002, p. 5,
www.cdg.org/resources/white_papers/files/Motorola_1xEV-DV_technical_overview_CDG1.pdf,
viewed 2 December 2004.

¹⁹ CDMA Development Group, *CDMA2000 1xEV-DV RELEASE D STANDARD APPROVED BY 3GPP2*, media release, 9 March 2004, www.cdg.org/news/press/2004/mar9_04.asp, viewed 2 December 2004.

²⁰ Communications Research Unit, *InfoByte: Mobile Phone Subscriptions December 2004*, DCITA, 2005, p. 1.

²¹ DCITA's Communications Research Unit noted that at December 2004, 91 per cent of subscriptions in Australia used GSM-based phones – Ibid.

²² Allen Consulting Group, *Australian Mobile Telecommunications Industry: Economic Significance*, Allen Consulting Group, Melbourne, 2004, p. 10.

²³ Ibid, p. 3.

²⁴ www.telstra.com.au/mobile/networks/info/cdma.htm viewed 29 September 2004.

metropolitan and regional centres in New South Wales and Victoria, and has roaming arrangements with Telstra CDMA.²⁵

Hutchison's '3' network is the largest operational WCDMA network in Australia. Optus launched the first phase of its WCDMA network in Canberra on 27 April 2005 as a trial for business and government users.²⁶ Telstra and Vodafone also plan to launch 3G networks in 2005. In a move to reduce operational costs and speed network rollout, Australia's four MNOs have recently entered into infrastructure sharing agreements that have not been opposed by the Australian Competition and Consumer Commission (ACCC). Information on these agreements is provided at box 4.2.

On 16 November 2004, Telstra launched EV-DO in all Australian capital cities and major regional centres, claiming average bit rates of between 300 and 600 kbps.²⁷ At its launch, Telstra's EV-DO upgrade was supported by two handsets with the capability to operate seamlessly across its existing 1xRTT and CDMA networks and non-cellular wireless 'hot-spots' where available.²⁸

²⁵ www.orange.net.au/index.cfm?pareauuid=E4426CE7-3AE6-11D6-BF5100A0CC617B10&psubareauuid=6636ADD1-3C56-11D6-BF5200A0CC617B10 viewed 29 September 2004.

²⁶ Optus, *Optus unveils 3G for business in Canberra*, media release, 27 April 2005, www.optus.com.au/portal/site/WOCA/menuitem.6d6045a9259bfcca9b2e6decc00345a0/?vgnextoid=53e7a81b34853010VgnVCM10000029867c0aRCRD&vgnextchannel=0b3cb5831cf2cf00VgnVCM1000006801540aRCRD&vgnnextfmt=default&cpsextcurrchannel=1, viewed 28 April 2005.

²⁷ Telstra Corporation, *Remote working simplified with Telstra mobile broadband*, media release, 16 November 2004, www.telstra.com.au/communications/media/release.cfm?ObjectID=32637, viewed 16 November 2004.

²⁸ See www.telstra.com.au/mobile/business/products/mobilebroadband.htm for a complete list, viewed 16 November 2004.

Box 4.2: Network Sharing Agreements 2004

Optus and Vodafone—Optus and Vodafone announced a Heads of Agreement on 26 August 2004 to build and operate joint 3G network infrastructure. A binding agreement was signed on 19 November 2004. The agreement provides for the sharing of over 2000 base stations, with initial network rollout in Sydney, Melbourne and Canberra. The parties expect the network to be operational in the third quarter of 2005. As noted above, Optus has commenced a trial of its 3G network for business and Government in Canberra. They will continue to operate separate retail businesses. On 14 December 2004, the ACCC announced it did not intend to oppose the agreement on competition grounds.

Telstra and Hutchison—Telstra and Hutchison announced a Heads of Agreement on 4 August 2004, and announced a binding agreement on 6 December 2004. This agreement is to establish a joint venture to own and operate Hutchison's WCDMA network and fund future network development, utilising the parties' existing 3G spectrum. In return for the 50 per cent ownership of the existing network, Telstra will pay Hutchison AUD\$450 million. The network will be operated by 3GIS, a joint-venture company.

Hutchison already provides 3G services and Telstra will launch its 3G services to customers in 2005. The existing network covers Sydney, Melbourne, Brisbane, Adelaide and Perth, and the parties expect to expand it into regional centres over the next three years. Canberra will be the first new market, with construction completed by end 2005.

While the cellular network will be run jointly, the parties will continue to operate separate core networks and retail businesses. The ACCC announced that it would not oppose the Telstra-Vodafone agreement on 10 December 2004.

Sources:

ACCC, *ACCC not to oppose 3G mobile radio access network sharing agreement between Optus and Vodafone*, media release, 14 December 2004.

ACCC, *ACCC not to oppose 3G radio access network sharing agreements between Hutchison and Telstra*, media release, 10 December 2004.

Allen Consulting Group, 2004, *op cit.*, p. 4.

Hutchison and Telstra, *Two year lead for Telstra-Hutchison 3G network*, media release, 6 December 2004.

Optus and Vodafone Australia, *Optus and Vodafone Australia announce plans to roll out shared 3G network*, media release, 26 August 2004.

Optus and Vodafone Australia, *Optus and Vodafone Australia finalise agreement to roll out shared 3G network*, media release, 19 November 2004.

Telstra, *Australia's first 3G network sharing to expand and accelerate customer access to world leading mobile service*, media release, 4 August 2004.

4.1 Non-cellular networks

Wireless networks that are not based on cellular architecture provide only limited mobility because connections cannot be transferred from one transmitter to another without cutting, and then reforming, the connection to the network. Such networks are more often used for connections by laptop or desktop PCs, rather than mobile handsets. They can therefore be described as ‘portable’.

However, the capacity to access non-cellular wireless networks is increasingly being integrated into cellular devices to enable roaming between cellular and non-cellular networks, thereby optimising network characteristics. The wireless standard ‘Bluetooth’, which enables data transfer between devices usually within a geographic range of ten metres, is near ubiquitous in newer cellular mobile devices and is increasingly incorporated into PCs.

4.1.1 Wireless local area networks (WLANs)

WLANs have been commonly used to provide corporate networks and are becoming increasingly popular in residential markets. Based on the so-called ‘802.11’ family of wireless standards known as ‘wireless fidelity’ (WiFi), this technology is now used to connect laptops to broadband Internet connections and is based on Ethernet standards. The International Telecommunications Union (ITU) has noted that WiFi is a ‘last metre’ connection, allowing a portable device to connect over a short distance to a fixed Internet connection.²⁹

- WiFi is open, not proprietary, and has been standardised by the international standards-making body, the Institute of Electronic and Electrical Engineers (IEEE). The coverage of WiFi networks is limited to a maximum of 100 metres, although in practice, interference often lessens coverage to approximately 50 metres. However, at bit rates up to 54 Mbps, WiFi networks are significantly faster than their cellular counterparts as demonstrated in figure 4.1 above.³⁰
- In addition to limited range, WiFi networks cannot provide equivalent mobility to cellular networks. If a user moves the device from the coverage of one access point to another, the connection must be severed from one and then connected to the other.
- The telecommunications market analyst, the Dell’Oro Group, found that the WLAN market worldwide was worth US\$509 million in 2003, an increase of 16 per cent from 2002.³¹

²⁹ International Telecommunications Union, *ITU Internet Reports: The Portable Internet*, ITU, Geneva, 2004, p. 9.

³⁰ *Ibid.*, pp. 20–23.

³¹ Cited in BuddeComm, *Global – Wireless – Broadband – WLAN – Statistics* 5 June 2004, p. 3.

4.1.2 Wider wireless networks

The next stage in open standard, non-cellular, wireless network development is the wireless metropolitan area network (WMAN). The industry standard is 802.16 and is referred to as WiMax (Worldwide Interoperability for Microwave Access). WiMax hardware has been commercially available since mid-2005. There are also plans for a certification process for WiMax equipment to be conducted by Cetecom Spain.³²

- Communications analyst, InStat, forecast that approximately three per cent of total broadband subscribers will be using WiMax access by 2009.³³

WiMax networks are claimed to have a much greater range than WiFi networks – theoretically 50 km from base stations (in line of sight) at fixed broadband speeds. The standard is hoped to also include a ‘hand-off’ ability to allow devices to roam between transmitters, like cellular devices. The standard is advocated by the organisation WiMax Forum, whose members include Intel and Nokia.³⁴

- Like WiMax, proprietary broadband wireless networks offer users broadband access without the need for any fixed infrastructure.³⁵ These have been rolled out worldwide.

4.1.3 Broadcast networks

Technologies that deliver content to cellular devices via broadcasting networks are being trialled and, in some cases, are in operation. The Digital Video Broadcast (DVB) forum has developed the DVB-H standard to deliver digital television signals to handheld devices. DVB considers that it can deliver adequate quality broadcast video at high compression, including to devices that are in motion.³⁶

The DVB-H standard is especially designed to preserve battery life and produce a signal capable of withstanding significant interference via a bandwidth of 100–300 kbps. DVB-H can operate in the spectrum used for Australia’s Broadcasting Services Band (BSB) and can make use of the cellular network as a back-channel to enable interactive television.³⁷ Nokia’s c7700 handset with prototype DVB-H receiver add-on is shown at Figure 4.3.

- The European Telecommunications Standards Institute formally announced DVB-H as the adopted standard for television services delivered to mobile devices on 26 November 2004.³⁸

³² WiMax Forum, *WiMAX Forum™ Selects Cetecom Spain to Begin Certification Testing in July 2005*, media release, 24 January 2005.

³³ InStat, *WiMax has Potential to Transform Telecom Markets*, media release, 16 February 2005.

³⁴ See www.wimaxforum.org/ for further information.

³⁵ WiFi, owing to its short range, usually requires a fixed access point in a user’s home.

³⁶ DVB, *DVB-H Handheld*, www.dvb.org/documents/white-papers/wp07.DVB-H.final.pdf

³⁷ See Digital Terrestrial Television Action Group, *Television on a Handheld Receiver – Broadcasting with DVB-H*. DigiTAG, Geneva, 2005, www.digitag.org/, viewed 20 April 2005.

³⁸ Middleton, J. ‘ETSI ratifies mobile TV standard for Europe’ *Telecoms.com News* www.telecoms.com/NASApp/cs/ContentServer?pagename=marlin/home&siteid=30000000461&mp_channelid=30000000378&MarlinViewType=ARTICLEVIEW&mp_articleid=20017293111&mp_pubcode=MTEL, viewed 30 November 2004.

- Trials of DVB-H technology have been undertaken in Berlin, Helsinki and Pittsburgh and Oxford.³⁹
- The then ABA granted Broadcast Australia, through its subsidiary The Bridge Networks, approval for a trial of DVB-H technology to be conducted in Sydney.⁴⁰ The trial is due to run until mid-2006.⁴¹

Other digital broadcast technologies may also be used to offer convergent content in the future.⁴² However, like DVB-H, user's devices would need to be fitted with appropriate hardware (e.g. a tuner) and software to access the content.

- South Korea has launched a mobile television service using a Digital Audio Broadcast (DAB)-based standard called Digital Multimedia Broadcasting (DMB). DMB is expected to be successful, with communications analyst InStat predicting US\$800 million in annual revenue by 2010.⁴³
- Virgin Mobile UK has launched a trial of a mobile TV service broadcast over the DAB digital radio network. The service will include a mobile electronic program guide and interactive TV services.⁴⁴

Figure 4.3: Nokia c7700

Source: *Broadcast Australia, submission to the review, p. 15.*



4.1.4 Satellite

Three correctly positioned communications satellites in geostationary orbit can provide global coverage. Satellites, therefore, potentially provide the widest range of any wireless technologies.⁴⁵ They are especially applicable in remote areas where it may not be feasible to install the infrastructure required for shorter range wireless networks, such as cellular base stations. While they offer long range and a potentially

³⁹ Broadcast Australia, submission to the review, p. 7.

⁴⁰ Broadcast Australia, *Approval for First DVB-H Trial in Sydney*, media release, 26 October 2004.

⁴¹ The Bridge Networks, *Bridge Networks Digital TV trial in Sydney*, media release, 14 June 2005, available at www.dba.org.au/index.asp?display=news&newsID=666, viewed 20 June 2005.

⁴² See Network Strategies Limited, op cit., pp. 101–102, for further information.

⁴³ InStat, *Digital Multimedia Broadcasting Shows Great Promise in Korea*, media release, 20 December 2004, www.instat.com/press.asp?ID=1189&sku=IN0402438AW, viewed 2 May 2005.

⁴⁴ Virgin Mobile UK, *Virgin Mobile brings the future of television to your mobile!*, media release, 2 June 2005, about.virginmobile.com/about/media/news/corporate/2005/2005-06-02, viewed 7 July 2005.

⁴⁵ ITU, op cit., pp. 16–17.

high bit rate, satellites are expensive to operate and can suffer from latency problems, owing to the physical distance data needs to travel between transmission and reception.

Data access is available over satellite by using either a one-way or two-way satellite link. One-way satellite connections receive data from the satellite, but upload via fixed infrastructure, such as a telephone line. Two-way satellite connections receive from and transmit to the satellite. Two-way satellite connections do not require a fixed connection and are therefore potentially available anywhere within the footprint of the satellite. Further information on satellite data access can be found at DCITA's Telinfo website www.telinfo.gov.au.⁴⁶

4.1.5 Australian market

WiFi devices are increasingly popular in the Australian market for the establishment of residential WLANs. Telstra offers wireless 'hot-spots' (small 802.11 networks) in partnership arrangements with Qantas, McDonald's and Starbucks. Optus and iPrimus offer similar services. Further, Telstra has commenced rolling out WiFi access in selected public phone booths on a trial basis.⁴⁷ According to researcher IDC, at the end of 2004, 200 000 Australian households had home networks, 45 per cent of which were wireless. At the end of 2005, almost 181 000 PC-based wireless home networks are predicted to be operational in Australia.⁴⁸

A number of Australian metropolitan ISPs are offering Internet access using proprietary wireless technologies, using wireless access to provide market differentiation. Unwired and Personal Broadband Australia (iBurst), based on Navini's Ripwave technology and Arraycomm's 'IntelliCell' technology respectively, have rolled out networks in population centres along the Eastern seaboard.⁴⁹ Unwired claims range of 10 km from a tower,⁵⁰ while iBurst's range is claimed to be between three km from a base station in built-up or hilly areas, to 13 km on flat terrain.⁵¹

Mobile telephone services are provided via satellite in Australia and qualifying persons are subsidised via the Satellite Phone Subsidy Scheme which commenced in March 2004. Further information on the scheme can be found on the DCITA website.⁵² Several Australian ISPs offer either one-way or two-way satellite data access, including Telstra.⁵³ The Australian Government's Broadband Connect program subsidises satellite broadband ISPs in remote Australia.⁵⁴

⁴⁶ www.telinfo.gov.au/Satellite%20broadband%20technology.htm#, viewed 27 April 2005.

⁴⁷ G Barker, 'Lowly payphone hot-wired' *The Age*, 13 December 2004, www.theage.com.au/articles/2004/12/1102786955375.html, viewed 13 December 2004.

⁴⁸ Cited in C Jenkins, 'Home networkers quickly warm to wireless', *Australian IT*, 24 May 2005, p. 30.

⁴⁹ See www.iburst.com.au/?whereisit=futurecoverage&main=whereisit&appCode=& and www.unwired.com.au/availability/index.php respectively, viewed 7 March 2005.

⁵⁰ www.unwired.com.au/unwired/how.php, viewed 11 November 2004.

⁵¹ www.iburst.com.au/site/support/faqindex.php, viewed 11 November 2004.

⁵²

www.dcita.gov.au/tel/mobile_telephone_services/overview_of_mobile_telephone_services/the_satellite_phone_subsidy_scheme, viewed 27 April 2005.

⁵³ www.bigpond.com/internet-plans/broadband/satellite/, viewed 27 April 2005.

⁵⁴ See www.dcita.gov.au/tel/higher_bandwidth_incentive_scheme_hibis, viewed 27 April 2005, for further information on HiBIS.

5 DEVICES

Devices are largely purpose-built for use on particular networks and can be defined as:

- fixed, such as a desktop PC;
- portable, such as a laptop;
- or
- mobile, such as a mobile phone or personal digital assistant (PDA).⁵⁵

Analysts and commentators are divided on the dominance of the phone handset as ‘the one’ mobile device needed by consumers. While some suggest that the phone handset will accrue the functionality of PDAs and mobile entertainment units, others see a continuing role for such devices with the phone handset becoming the ‘hub’ providing connectivity between them. Whichever view proves correct, the increasing capabilities of devices suggest that consumers will soon be able to access a wide range of rich audiovisual content on the move.

5.1 Handsets

Network Strategies considered that currently available phone handsets can be identified as follows:

- standard phones, which traditionally provided little more than voice and SMS capabilities, but now offer MMS capability, colour screens and data access;
- feature phones, which may offer high resolution colour screens, cameras or extra connectivity; and
- smartphones, which are devices with the capabilities of PDAs and cellular handsets. They offer advanced personal information management (PIM) applications and may offer full email access and word processing applications.⁵⁶

The underlying technologies, functions and capabilities of the three categories of handsets can be seen at figure 5.1 below.

⁵⁵ See ITU, *op cit.*, p. 5.

⁵⁶ Network Strategies Limited, *op cit.*, pp. 106–7.

Figure 5.1: Handset capability

Source: *Analysys, cited in Network Strategies Limited, op cit., p. 108.*

	Smartphones	Feature phones	Standard phones
Operating system	Open OS – typically Symbian, Microsoft, Linux	Proprietary OS supporting advanced messaging, PIM and gaming applications	Basic proprietary OS closely linked to the hardware
Middleware	Basic J2ME functionality along with advanced variants (e.g. Mophun in Sony Ericsson)	Basic J2ME functionality	Limited J2ME availability
Applications	Wide range of advanced PIM, Messaging and selected desktop applications. Advanced gaming, Multimedia including MP3, MPEG4	Primarily PIM and advanced messaging. Advanced gaming. Multimedia – typically MP3	Basic gaming (normally built -in) and messaging options
User interface	Icon driven with pen -based input	Icon driven	Primarily list based
Peripherals	Bluetooth and sometimes 802.11 connectivity, camera, high resolution colour screens. Speakerphone	Bluetooth connectivity, camera, high resolution colour screens, Speakerphone	Low resolution colour screens / black and white

5.1.1 Smartphones

Smartphones represent the ‘cutting edge’ of handset development and provide an indication of future device capabilities. They are, in effect, pocket sized PCs with cellular access, made possible by the implementation of advanced open operating systems. Network Strategies noted that such systems enable the development of multiple applications for multiple handsets and thereby support the development of advanced features, services and connectivity. Previously, operating systems were tied to a manufacturer, limiting application development and innovation.⁵⁷

- While Smartphones are currently a small market segment, under five per cent at the end of 2004 according to technology analyst IDC,⁵⁸ that figure is expected to rise. ABIResearch predicts smartphones will account for between 15 to 20 per cent of the wholesale market within two years and IMS Research has predicted they will form 22 per cent of the market by 2009.⁵⁹

Newer smartphones are being released with advanced connectivity options. It is now common for a smartphone to include Bluetooth capability and sometimes an 802.11 chip to enable synchronisation with a home WLAN.

- In the United Kingdom, BT has released its *BT Fusion*, a wireless handset which operates across multiple networks. While the user is at home, it utilises a Bluetooth connection to a wireless hub providing access to a broadband Internet

⁵⁷ Ibid., p. 104.

⁵⁸ IDC, *European Mobile Phone Market Grows 24% in 3Q04 as Color Screens and Cameras Further Penetrate Midrange and Low-End Handsets*, says IDC, press release, 23 November 2004.

⁵⁹ ABIResearch, *Wireless Handset Market* media release, 2003, cited in Network Strategies Limited, op cit., p. 108; and IMS Research., *IMS Research News*, November 2004.

connection, outside of the home, it uses Vodafone UK's cellular network. The system is also WiFi ready, enabling connection to an 802.11 network.⁶⁰

5.1.2 Handset limitations

Feature phones often contain digital cameras and the ability to send pictures to other devices via the cellular network or Bluetooth. They can also download and run relatively advanced games, and access some Internet content. Feature phones currently represent the growing segment of the consumer market for handsets. Analyst, InfoTrends Research Group, for example, forecast that camera phones would form over 25 per cent of handset shipments in 2004.⁶¹

However, when compared with smartphones, feature phones are limited in terms of processing power, screen size and resolution and memory, meaning that the range of applications that can be run on them, and therefore the amount and complexity of audiovisual content that can be accessed, is restricted.

It is unlikely, however, that this limitation will be an issue in the medium to long term. The increasing popularity of smartphones noted above in section 5.1.1 and the processing power required to access multiple networks is likely to drive smaller and more powerful devices that have fewer limitations than, if not all of the functionality of, smartphones.

- Network Strategies noted that handsets with over 1 Gb of memory have been released, and that the move to larger storage on handsets will be driven by music downloads.⁶²
- Samsung has produced two handsets incorporating hard disk drives. The most recent, the SGH-i300 has a 3 Gb drive and is designed specifically to be used as a portable music player.⁶³

5.1.3 Segmented devices

While technology will enable single devices to run multiple applications and access multiple platforms, some commentators suggested that they may not be optimised to do any one application, leading to a less satisfactory experience for the user. As a result, there may be a continuing demand for segmented devices, which are specialised for specific tasks.

The N-Gage QD, for example, is optimised for gaming, but still provides a fully-functional mobile phone. Games available for the N-Gage QD include the ability to play with or against opponents via Bluetooth or over GPRS.⁶⁴

⁶⁰ C Everett, 'BT launches "watershed" fixed and mobile handset', *ZDNet UK*, 15 June 2005, news.zdnet.co.uk/communications/wireless/0,39020348,39203738,00.htm, viewed 22 June 2005. See www.btfusion.bt.com, viewed 6 July 2005, for further information.

⁶¹ InfoTrends Research Group, *Worldwide camera phone sales to reach nearly 150 million in 2004, capturing 29 billion digital images*, press release, 11 March 2004, www.infotrends-rgi.com/home/Press/itPress/2004/3.11.04.html, viewed 18 March 2005.

⁶² Network Strategies, *ibid.*, p. 110.

⁶³ See www.samsung.com/PressCenter/PressRelease/PressRelease.asp?seq=20050311_0000102071, viewed 31 May 2005.

⁶⁴ See www.nokia.com.au/nokia/0,,56351,00.html, viewed 18 February 2005.

The Research in Motion Blackberry represents a similarly targeted marketing approach. Focussed on the corporate market, the Blackberry is a mobile handset with email capability and has been a strong seller in the marketplace. Blackberry handsets are available from Telstra, Optus and Vodafone in Australia and other manufacturers, such as Nokia and Motorola, produce devices with Blackberry software and functionality.⁶⁵

Many devices may be specialised in this way in the future, with full connectivity between them. A subscriber may have a multitude of networked devices that are optimised for particular tasks. These devices will increasingly have access to any content, any time, over any network.

5.2 Laptops

A laptop PC with WiFi networking capability is portable, but still limited to the range of the wireless receiver. As explained in section 4.2, non-cellular wireless networks do not have ‘hand-off’ capability, so a laptop connected to a WiFi network does not have the ability to roam between reception areas without disconnecting and then reconnecting to the network.

Cellular vendors have introduced Personal Computer Memory Card International Association (PCMCIA) cards to be inserted into laptops that provide data access via the cellular networks.⁶⁶ Optus, Telstra, Vodafone and Hutchison all offer these cards providing access to their various networks. Other devices exist to provide cellular access to PCs, including Universal Serial Bus (USB) devices.

- Telstra offers a PCMCIA card that provides access to its WiFi hotspots, EV-DO network and 1xRTT network, selecting the fastest available connection.⁶⁷

5.3 Consoles

The new generation of games consoles are equivalent to powerful PCs, optimised for their specific tasks. They are also relatively portable, although not mobile, and provide a level of connectivity unseen in previous devices of this type. Microsoft’s X-Box and Sony’s Playstation 2 provide the ability to connect the consoles to the Internet over a broadband connection.⁶⁸ Both of these services provide the ability to play against other gamers online.⁶⁹ With the addition of relevant hardware, it is possible to connect these devices via a WiFi network.

- The network services provided to these devices include the ability to connect a headset with microphone to enable live voice communications with other gamers. The connections are provided using VOIP.

⁶⁵ ‘Attack of the Blackberry Killers’, *The Economist*, 19 March 2005, p. 62.

⁶⁶ PCMCIA is an international standards body for peripherals for portable computers.

⁶⁷ See www.telstra.com.au/mobile/business/products/pdf/aircard_ug.pdf for further information, viewed 10 March 2005.

⁶⁸ The services are known as ‘X-Box Live’ and ‘Playstation 2 Network Gaming’. See www.xbox.com/en-AU/live/default.htm and au.playstation.com/ng/index3.jhtml for more information, viewed 8 March 2005.

⁶⁹ Nintendo plans to incorporate online connectivity into a future release of its GameCube console in Australia (see www.nintendo.com.au/gamecube/faqs/index.php, viewed 8 March 2005).

Handheld games consoles are a further group of devices with potential connectivity options. The Nintendo Gameboy Advance DS offers a handheld gaming platform with limited PDA functionality. Further, this device includes wireless functionality via both 802.11 (WiFi) and a proprietary wireless access system. This allows linked gaming between handsets.⁷⁰ Sony's PSP (Playstation Portable), which was released in Australia in September 2005, has similar connectivity functionality.⁷¹

5.4 Media players

Devices such as the Apple iPod provide the ability to play digital media (audio and/or video) files on the move. The devices store media (or other data) files digitally in a compressed form.⁷² Higher level mobile handsets are now being released with similar functionality to mobile media players, but are limited by storage space.

These devices are generally connected to a PC or other device via cables and data is then uploaded onto the device providing inherent portability of audio and video files. The current models do not have connectivity, but require connection to another device.

Analyst IDC has predicted that by the end of 2005, the total number of portable media players in the Australian market would reach 1.3 million.⁷³ The Pew Internet and American Life Project has surveyed American adults and found that 11 per cent of them (14 per cent of men and nine per cent of women) own portable media players.⁷⁴

⁷⁰ See nintendo.netagi.com/ds/system/index.php, viewed 8 March 2005.

⁷¹ Sony Computer Entertainment, *Playstation portable to launch across Australia and New Zealand*, media release, 26 April 2005, www.yourpsp.com.au/html/en_AU_press_release.pdf, viewed 2 May 2005.

⁷² Commonly MP3 or WMA for audio, and MP4 or 3GPP for video.

⁷³ IDC, *Portable MP3 player market to double to 1.3m units in 2005, predicts IDC*, media release, 4 April 2005, www.idc.com.au/solutionscentre/telco/press_detail.asp?releaseid=154, viewed 14 June 2005.

⁷⁴ Pew Internet and American Life Project, *iPods and MP3 players storm the market*, 14 February 2005, www.pewinternet.org/PPF/p/1047/pipcomments.asp, viewed 14 June 2005.

6 SERVICES

As networks and devices become increasingly capable, the range of innovative services is also increasing. Convergent devices are progressively able to access media-rich audiovisual services, which have traditionally been the domain of broadcasting networks or PCs with Internet connections. Similarly, the Internet, through VOIP technology, is able to carry voice signals.

Hutchison noted in its submission to the review that:

Present 3G communications devices contain a variety of applications that are typically found on personal computers,...including HTML browsers, audio and video streaming clients, multiplayer games and email applications. These applications are representative of the general principle that anything that can be done on a personal computer can also be done on a present 3G device, subject only to the physical limitations of the device.⁷⁵

The content services offered by Australian mobile CSPs are broadly similar. Generally, customers access content by either:

- browsing ‘content portals’ in a similar manner to the Internet, which contain a variety of personalisation, games and information content reflecting the popular services of the moment;
- or
- calling premium rate numbers, which are SMS, MMS or telephone calls charged at a rate higher than usual. The premium rate model is discussed further at section 11.1 below.

Network Strategies considered that mobile content services are in their infancy and currently are generally targeted at the youth and young adult markets.⁷⁶ While some services, such as Hutchison’s ‘On3’ and the Optus Zoo content portals, provide video content, generally speaking, the mobile content available to Australians can be categorised as:

- personalisation content (ringtones, wallpapers, logos);
- games (SMS, WAP, Java, BREW);
- interactive communications services, such as instant messaging and chat rooms; and
- information services (news, sport, weather, horoscopes).

The most popular services delivered by Australian carriers can be seen below at figure 6.1. This figure demonstrates that many popular content services-dating services, games, email and news and sport-are currently available on other platforms.

⁷⁵ Hutchison Telecommunications, submission to the review, p. 2.

⁷⁶ Network Strategies Limited, op cit., p. 26.

Figure 6.1: Most popular mobile content services

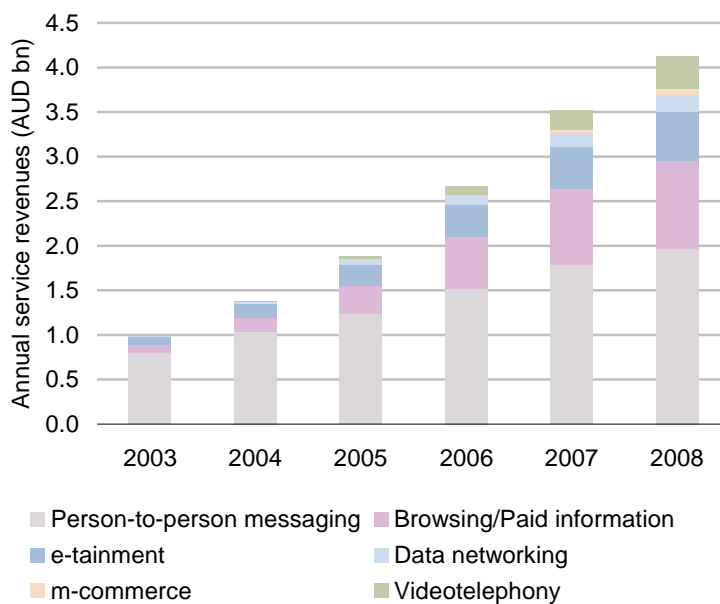
Source: *Network Strategies Limited, op cit., p. 28.*⁷⁷

Telstra	Optus	Vodafone	Hutchison
Personalisation (ring tones and logos)	Promotion and voting activities	Personalisation (ring tones and logos)	Ring tones
Chat/dating services	Ring tones	News and sport	Games
Games	Chat	Infotainment	Big Brother
Email			

Network Strategies predicted the breakdown of revenues from different forms of content services in Australia in figure 6.2 below. As can be seen, the majority of data revenues in the short term will remain person-to-person messaging. Other data services will increase in popularity, with ‘Browsing/Paid Information’ predicted to overtake e-tainment (which includes personalisation content, such as ringtones, games and logos), in 2006. This represents a gradual shift towards media-rich content.

Figure 6.2: Estimated development of non-voice revenues, Australia

Source: *Network Strategies Limited, op cit., p. 34.*



6.1 Personalisation content

Personalisation content, such as ringtones, wallpapers and images to individualise a person’s device, is currently one of the most popular forms of consumer content. Telecommunications and software analyst, Ovum, estimated that it was worth US\$1.6 billion in Western Europe in 2004.⁷⁸ Frost and Sullivan suggested that

⁷⁷ Network Strategies noted, however, that, ‘[o]perators note that popularity varies on a daily basis in response to seasonal or one-off events, or promotional activities.’ Network Strategies Limited, op cit., p. 34.

⁷⁸ Ovum, *The future of phone personalisation: music to your ears?*, press release, May 2004, see store.ovum.com/detail.aspx?ID=893 viewed 24 November 2004.

69 per cent of the \$129 million in revenue that mobile content generated in Australia in 2004 was from the mobile personalisation area.⁷⁹

Ringtones are a significant form of entertainment content. They range from the monophonic tones provided by 2G platforms, to polyphonic tones on 2.5G and now ‘truetones’ and increasingly, ‘realtones’. Underlining the commercial importance of the ringtone market, the Australasian Performing Right Association and Australasian Mechanical Copyright Ownership Society noted in their submission to the review that licensing models have been developed for many types of ringtones.⁸⁰ Further, it has been reported that the ringtone market in Australia is already larger than that for CD singles.⁸¹

It is questionable whether the current market for personalisation content will be sustained into the future. Network Strategies noted that content providers see it as a legacy content service, with the games market providing a more sustainable revenue stream.⁸² As connectivity between fixed and mobile devices increases, it is likely to become easier for consumers to create their own wallpapers from personal photographs and their own ringtones from downloaded MP3 music files.

The Australian Direct Marketing Association, in its submission to the review, noted that the success of ringtones in the marketplace has laid the foundation for downloads of full music tracks. However, the limitations of devices and the charges levied by carriers currently limit services of this type.⁸³

6.2 Games

The continued success of the Nintendo Gameboy demonstrated the possibilities of handheld gaming, and since Nokia began putting the basic ‘Snake’ computer game on its early 2G handsets, the games market for mobile handsets has been growing consistently.

Market analyst, Juniper Research, estimated that mobile gaming revenues accounted for 57 per cent of total mobile content revenues globally in 2003, and will be worth US\$9.7 billion by 2008.⁸⁴ Media researcher, Screen Digest, estimated that the global mobile gaming market will reach US\$1 billion by the end of 2004.⁸⁵

⁷⁹ Cited in ‘The mobile content hockey stick?’, *Competitive Carrier*, 11 June 2005, p. 3.

⁸⁰ Australasian Performing Right Association and Australasian Mechanical Copyright Ownership Society, submission to the review, p. 3.

⁸¹ See L Houlihan, ‘Ringtones pop CD bubble’, *Herald Sun*, 9 March 2005, p. 9 and D Scatena, ‘Pop goes the industry’, *The Bulletin*, 15 March 2005, pp. 60–64 at p. 63.

⁸² Network Strategies Limited, op cit., p. 28.

⁸³ Australian Direct Marketing Association, submission to the review, p. 2.

⁸⁴ Juniper Research, *Mobile Games*, Juniper Research Limited, Basingstoke, 2003, p. 18.

⁸⁵ Reuters, *Mobile Phone Gaming to Top \$1 billion in '04*, 28 October 2004, at www.reuters.com/newsArticle.jhtml?type=technologyNews&storyID=6645080, viewed 24 November 2004.

Juniper Research noted that there are four types of mobile games:⁸⁶

- embedded games that are hardwired into handsets, such as ‘Snake’;
- SMS games, such as trivia games;
- MMS games, which are graphically based, but limited in their complexity; and
- rich media games, enabled by the Java and BREW application program interfaces (APIs).

Juniper considered that it is the increasing availability of rich media games that will drive the growth in popularity and revenue from mobile games.⁸⁷ Games with relatively complex graphics, sound and animation have been enabled by the near-standard integration of the Java and BREW APIs into mobile handsets. APIs sit between the software (game) and the operating system of the handset to enable the same game to be played across many handsets.

- Java is an API developed by Sun Microsystems that is designed to run media-rich content on PCs. The version of Java that is used on mobile handsets is a stripped down variant called J2ME (Java 2 Mobile Edition), which is now effectively ubiquitous on GPRS phones.
- BREW, which stands for Binary Runtime Environment for Wireless, is in use in the CDMA world, and was developed by Qualcomm.

The two standards in use in Australia, GSM/GPRS and CDMA, mean that games must be repurposed for both Java and BREW APIs. Further, because the APIs are embedded in a great variety of handsets, the games themselves must be optimised for the ‘lowest common denominator’, recognising the limitations in memory and screen resolution of the less advanced devices. This reduces the complexity of the games and leads to a relatively simplistic user experience. The review considers that these market limitations will become less relevant in the short to medium-term.

The potential popularity of interactivity in gaming was noted in section 5.1.3 (segmented devices) in the context of the N-Gage QD. More sophisticated games can take advantage of a Bluetooth link between handsets or to the GPRS or WCDMA network to enable game play between users. Hutchison, for example, offers ‘Badlands’ and ‘Randy Trickle’s Super Truck-off’ to its On3 subscribers, both of which enable real-time play between subscribers across the WCDMA network.⁸⁸

6.3 Rich media content

In addition to the increasingly sophisticated games noted above, the advancing technological complexity of convergent devices and the increased bit rates of 2.5G and 3G cellular networks have led to the development of other rich media content that utilises pictures, animation and video. Some of this content, such as downloadable

⁸⁶ Juniper Research, *Mobile Games*, op cit., pp. 54–56. Network Strategies also noted the existence of WAP games, which are played across the network similar to online games played via a PC: Network Strategies Limited, op cit., p. 26.

⁸⁷ Juniper Research, *Mobile Games*, op cit., p. 57.

⁸⁸ Both games are produced by Viva La Mobile. See www.vivalamobile.com/multiplayer.htm, viewed 8 March 2005.

images and stored and streamed video-clips, is recognisable as on-demand content typically available on the Internet. Other content is more akin to broadcasting content, being a continuous scheduled stream of services, which the subscriber accesses from time-to-time.

In the United Kingdom, Vodafone 3G recently launched *24: Conspiracy*, a series of 24 one-minute video 'mobisodes' that can be accessed and viewed by Vodafone 3G subscribers. The series is created specifically for mobile handsets and is based on the TV series *24*. Reportedly, Vodafone Australia is considering launching the service in Australia once the 3G network is operational.⁸⁹

Locally, IconMedia launched *Random Place* on 2 May 2005, a mobile soap opera accessed by subscribers via a WAP link which is sent to their handsets by SMS. Each *Random Place* mobisode is sent as a series of still images with captions. The Australian Film Commission (AFC), in its submission to the review, cited the example of a similar MMS soap opera, *FanTESStic*, which was developed by Endemol and released in Spain in 2004. *FanTESStic* has been launched in Australia by Slice Wireless and Endemol Southern Star.⁹⁰ The AFC also noted Tasmanian animation studio Blue Rocket Productions, which has signed a number of distribution deals with international mobile carriers to provide animation content for various markets.⁹¹

The increased bandwidth available to Hutchison on its WCDMA network has allowed the provision of a suite of rich media content services. Network Strategies noted that the On3 portal includes:

- viewing movie trailers in addition to screening times;
- downloading music videos;
- receiving video clips with news bulletins;
- watching replays of sports highlights;
- checking live camera footage: *Big Brother* and surfcams (enabling the user to view the surf conditions at five Australian beaches);
- seeing video interviews with pole dancers; and
- viewing video clips from The Comedy Channel and episodes of the BBC's *Fawlty Towers*.⁹²

Another example of rich media content that is currently available in Australia is the Optus Zoo TV service, which was launched in November 2003. Zoo TV provides retransmitted streamed access to the national ABC and SBS television services. It also

⁸⁹ L Sinclair, 'Soopies the new mobile ring-ins', in *Australian IT*, 3 March 2005, australianit.news.com.au/articles/0,7204,12422661%5E15306%5E%5Enbv%5E,00.html, viewed 4 May 2005.

⁹⁰ Slice Wireless and Endemol Southern Star, *Mobile Soap Opera*, media release, 7 April, 2005, available at www.slicewireless.com/portals/0/release%20slice%20and%20TESS%20050407.pdf, viewed 20 June 2005.

⁹¹ Australian Film Commission, submission to the review, pp. 6–7.

⁹² Network Strategies Limited, op cit., pp. 85–6, current at September 2004.

provides subscription access to CNN International (CNNi).⁹³ In addition, the review has noted the Australian trial of DVB-H in section 4.1.3, which will broadcast to all capable handsets multiple streams of television services.

The review notes that the continuous development of networks and devices is leading to a market in which the content accessible is becoming more rich, more complex more resource-intensive and potentially more compelling.

6.3.1 Adult content

For the purposes of this section, the term ‘adult content’ refers only to sexually explicit material and excludes gambling or other content that would be considered inappropriate for minors.

The consumer market for adult content has reputedly been a significant driver of growth in Internet usage and development worldwide. Early reports from overseas markets with operational 3G networks suggest that, in the absence of government prohibitions, there is a viable market for adult content services to mobile convergent devices.

In its 2003 report, *Mobile Adult Content*, UK analyst Juniper Research estimated that adult content would account for three per cent of total mobile content revenues in 2003, rising to five per cent in 2008.⁹⁴ According to Juniper, these figures would equate to a market of US\$306.4 million in 2003 and US\$1 908.3million in 2008.⁹⁵ Research group Strategy Analytics quoted similar figures, stating that users spent US\$400 million on pornographic pictures and video for mobile content services in 2004 and would spend US\$5 billion in 2010, which would account for five per cent of total spending by users on mobile content services.⁹⁶

Adult content services to mobile convergent devices can include:

- text based ‘flirty’ or sex chat services;
- image downloads;
- voice services; and
- video content.

The ARC Group has estimated that image downloads will exceed text, video or voice services for the short to medium term. Mobile Communications International, in citing the ARC Group assessment, attributed this to handset limitations.⁹⁷ Likewise, Juniper Research identified device limitations as a hurdle to the success of adult content services. It identified the following specific limitations:⁹⁸

⁹³ For further information, see Optus, submission to the review, pp. 8 and 13–15.

⁹⁴ Juniper Research, *Mobile Adult Content*, Juniper Research Limited, Basingstoke, 2003, p. 16.

⁹⁵ *Ibid.*, p. 89.

⁹⁶ Strategy Analytics, *Mobile Adult Services Just A Side Show?*, media release, 17 March 2004, www.strategyanalytics.com/press/PR00160.htm, viewed 18 March 2004.

⁹⁷ M Hibberd, ‘For Your Eyes Only’ in *Mobile Communications International*, issue 115, October 2004, pp. 46–52 at p. 50.

⁹⁸ Juniper Research, *Mobile Adult Content*, *op cit.*, p. 92.

- screen size;
- screen quality; and
- memory constraints limiting the size of video and available storage.

For the reasons discussed in section 5.1, these particular handset limitations can be expected to be resolved in the short to medium-term. This is anticipated in the Juniper report, which predicts significantly higher growth for adult image and video revenues, by comparison with text-based content in the five years to 2008.⁹⁹ This is consistent with the broader finding of the review noted above, which is that, more and more, content services will become richer and more complex and will increasingly resemble content available over the Internet and broadcasting networks.

Access to adult content services in Australia, like other forms of audiovisual content, is available by several means. As is discussed below in section 11.2, telephone sex services are available on the 1901 number range and via mobile CSP content portals. Adult services are also available by calls to international numbers, or can be purchased by use of a credit card. Adult content can also be accessed from dial-up fixed Internet accounts by using software known as an Internet dialler. Internet dialler services disconnect the user from their usual ISP and reconnect them to an international number, sometimes without the knowledge or consent of the user. Internet dialler services have not been available on Australian premium rate number ranges since August 2003. The review notes that diallers are not an issue in relation to convergent devices, as data access for these devices is not on a dial-up basis.

Currently in Australia, the only mobile network operator offering adult content services on its content portal is Hutchison, which provides services including *Playboy* content over the 'On3' platform. Hutchison has implemented age-verification procedures for access to this content which includes images and video. According to its submission to the review:

Hutchison's age verification systems require a date of birth and citing of identification. Where for some reason this information is sighted but not captured at point of sale, Hutchison requires customers to complete a form and provide a copy of identification by facsimile or post.¹⁰⁰

Other industry submissions to the review suggested support for restricted access to adult content services. Virgin Mobile submitted that:

It is vital to the Virgin brand that we take our responsibilities in relation to offensive and adult content seriously. The mobile industry generally also benefits from responsible service provision, as take-up of mobile devices is likely to be limited if there is general community concern that the devices do not contain adequate consumer safeguards.¹⁰¹

⁹⁹ Ibid., pp. 69, 78 and 86.

¹⁰⁰ Hutchison Telecoms, submission to the review, p. 10.

¹⁰¹ Virgin Mobile Australia, submission to the review, p. 2.

Similarly, Vodafone considered that such content should be restricted to those 18 or over.¹⁰² Optus noted that:

Certain tools available in the fixed environment to control access to adult content may not be practical on mobile devices, causing attention to be focussed on restricted access systems and age verification procedures for users.¹⁰³

Further information on access controls and restricted access systems applied to other content delivery platforms can be found below in sections 9 and 10.

6.4 Non-voice communications services

Traditionally, communications services have been either private, person-to-person telephony services or public, broadcasting services. Internet-based communications such as online forums, chat rooms and web logs (blogs) have blurred that distinction and demonstrated the popularity of consumer-created content. Convergent communications devices offer the opportunity for consumers to generate and access such content, which is often real-time, on the move. Additionally, because of the business models for mobile devices that are discussed in section 7.1 below, they provide a commercial basis for offering such services. This contrasts with the Internet, where the ability to generate and access consumer-created content is generally free of charge.

A variety of non-voice communications services are currently available on mobile devices. In the course of developing the interim arrangements pending this review, the then ACA identified the following services based on service characteristics:

- operator one-to-one services that allow users to send messages to and receive messages from the service operator;
- peer-to-peer services, such as dating services, which can be accessed by users through a registration process;
- closed user group services, such as Instant Messaging (IM), where members are known to one another;
- IM services, including those with multi-party chat capabilities, which allow dialogue between unknown parties; and
- public group chat services that allow open dialogue between unknown parties.

Of these service types, the then ACA drew a distinction between operator one-to-one, closed user group and registration-based peer-to-peer services on the one hand and public group chat services on the other. The services in the former group are provided either between consumers who are known to each other or rely on the service administrator to exchange messages between participants. The then ACA characterised these as ‘interactive mobile services’. Only public group chat services on mobile devices possess the services characteristics of chat rooms as commonly understood on the fixed Internet.

¹⁰² Vodafone, submission to the review, p. 3.

¹⁰³ Optus, submission to the review, p. 10.

6.4.1 Interactive mobile services

In the case of operator one-to-one and peer-to-peer services, communication between parties is private. In the former, messages can only be seen by the consumer and service administrator. In the latter, consumers can send messages to and receive messages from a single other user of a service at a given time. In this case, the identity of other users may or may not be known. Generally, however, users are identified by a nickname and phone numbers are masked.

In closed user group services, such as IM, consumers can only participate where they have registered to be a part of the group through the administrator or expressly granted their permission to appear on another's contact list via a compulsory request and response procedure. Users send and receive messages to all participants in the group and participants see all messages posted to the group. The identity of other users is known either to all of the users of the service or to the administrator of the service.

An example of the closed user group type of service, as identified by the ACA, is provided by WorldTribes, which allows groups of people to set up 'tribes', which are messaging lists enabling one-to-many SMSs to be sent at a premium rate. The cost for distribution of messages is shared between the sender and the receivers and the creator of the tribe is able to expel people from its membership if necessary. All users are known to one another and the phone number of the person sending the message appears in the text.¹⁰⁴

IM services provide real-time communication between end users who have installed client software. Consumers have 'buddy' lists of friends who have also installed the relevant software, and can send messages amongst those who are online at a given time. IM client software is currently available for a selection of mobile handsets¹⁰⁵ and can be either SMS or WAP-based.

Another closed user group service available on mobile devices is push-to-talk over cellular (PoC). PoC is a chat-like service that utilises VOIP technology to enable one-to-many voice communication over the mobile network by providing 'walkie-talkie' functionality to mobile handsets. It provides the ability for subscribers with PoC enabled handsets, at the press of a single button, to talk to one or more members of their designated group. Group members are known to one another and can also see the name of the person(s) to whom they are talking on their handset screen. To date, PoC has proved most popular in the United States, largely as a work force management tool amongst business users. It has recently been made available in Australia by Telstra and Optus.¹⁰⁶

¹⁰⁴ WorldTribes Pty Ltd, *Submission to the ACA on Regulation of Premium Services*, 2005, pp. 2–3; and www.worldtribes.com, viewed 31 March 2005,

¹⁰⁵ See, for example, Handango's IM client for Motorola 3G handsets at www.handango.com/3au/PlatformProductDetail.jsp?siteId=1132&osId=452&jid=X7DAFE423791AX477E5286DD1CFE3A78&catalog=0§ionId=0&productType=2&platformId=4&productId=64989, viewed 6 May 2005.

¹⁰⁶ See www.telstra.com.au/mobile/products/ptt/index.htm and www.optus.com.au/ptt respectively, viewed 20 June 2005.

6.4.2 Chat

The online technology dictionary, *whatis.com* defines a chat room as:

...a Web site, part of a Web site, or part of an online service such as America Online, that provides a venue for communities of users with a common interest to communicate in real time. Forums and discussion groups, in comparison, allow users to post messages but don't have the capacity for interactive messaging... Chat room users register for the chat room of their choice, choose a user name and password, and log into a particular room (most sites have multiple chat rooms). Inside the chat room, generally there is a list of the people currently online, who also are alerted that another person has entered the chat room. To chat, users type a message into a text box. The message is almost immediately visible in the larger communal message area and other users respond.¹⁰⁷

Chat rooms are commonly openly accessible, real-time and interactive. Because they usually require the end user to select a username or nickname to start messaging, they are also widely believed to be places where people can be anonymous.

If permitted by the service, consumers may elect to go into a private chat room with one or more other participants. WAP-based mobile chat services allow participants to see all of the messages posted to the service except for private chat sessions. However, where mobile chat services are SMS-based, participants can only see and respond to the messages that they personally receive.

The largest provider of chat room services to mobile devices worldwide is the Australian-based company, Jumbuck.¹⁰⁸ Jumbuck's services are based on proprietary software and the services are hosted and operated in Jumbuck's facility in Perth. Jumbuck provides WAP-based chat services to Telstra, Optus, 3, Orange and Vodafone in Australia.¹⁰⁹ Consumers are charged for using the service through their CSP's phone bill.

6.5 Location-based services

Location-based services have been used in the fixed environment for some time, with calls to certain 13x numbers – owned by taxi or food delivery chains, for example – routed to the caller's nearest service, and 000 emergency calls capturing location information. The addition of location-based services to wireless networks provides additional commercial opportunities to service providers.

One of characteristics of cellular networks is the capacity to capture network information about the location of consumers. As networks have developed, the technologies that provide that information have also developed and provide increasingly specific information. Box 6.1 below explains the three basic technologies that provide network-derived location information.

The impetus for the development and refinement of technologies to capture location information has been provided by government regulations, especially in the United

¹⁰⁷ searchwebservices.techtarget.com/sDefinition/0,,sid26_gci541370,00.html, viewed 10 March 2005.

¹⁰⁸ Network Strategies Limited, *op cit.*, p. 70.

¹⁰⁹ See [www.jumbuck.com/index.php?a=powerchat&content\[type\]=getit](http://www.jumbuck.com/index.php?a=powerchat&content[type]=getit), viewed 10 March 2005.

States, which requires location information to be available to emergency services and law enforcement agencies.

In the United States, the E911 mandate requires all carriers to provide the following accuracy of location information to 911 (emergency) calls:

- for handset-based solutions: 50 metres for 67 per cent of calls and 150 metres for 95 per cent of calls; and
- for network-based solutions: 100 metres for 67 per cent of calls and 300 metres for 95 per cent of calls.¹¹⁰

In Europe, in May 2000, the European Commission established the Coordination Group on Access to Location Information by Emergency Services (CGALIES) to define requirements for a pan-European mechanism for access to location information of calls to the 112 emergency number. The CGALIES released its final report on 19 February 2002.¹¹¹ Following from the work of the CGALIES, the European Commission has noted that common technical solutions for the provision of location information should be sought across member states and has recommended that:

For every emergency call made to the European emergency call number 112, public telephone network operators should, initiated by the network, forward (push) to public safety answering points the best information available as to the location of the caller, to the extent technically feasible.¹¹²

To encourage interoperability of location-based service technologies, the Open Mobile Alliance has established a Location Working Group to ‘develop specifications to ensure interoperability of Mobile Location Services on an end-to-end basis’.¹¹³

In Australia, the then ACA released a discussion paper on the future use of location information in relation to the handling of emergency mobile phone calls on 22 January 2004. The paper, entitled *Location, Location, Location* suggested that a regulatory approach similar to the United States may not be necessary in Australia given network operators’ other incentives to develop location technologies.

The availability of technologies to provide location information has led to the development of a range of commercially offered location-based services. These are broadly divided into two categories:¹¹⁴

- ‘active’ or ‘pull’ services that are initiated by an action, such as an SMS, from the consumer requesting the location, for instance, of the nearest post office or requesting that a taxi be sent to the person’s present location; and

¹¹⁰ Federal Communications Commission, *Fact Sheet: FCC Wireless 911 Requirements*, FCC, Washington, 2001. available at www.wirelessdevnet.com/e911/factsheet_requirements_012001.pdf, viewed 26 November 2004.

¹¹¹ The final report is available at europa.eu.int/comm/environment/civil/pdfdocs/cgaliesfinalreportv1_0.pdf, viewed 26 November 2004.

¹¹² Commission Recommendation of 25 July 2003, 2003/558/EC, OJ L 189, 29.7.2003, p. 51.

¹¹³ Open Mobile Alliance, www.openmobilealliance.org/tech/wg_committees/loc.html, viewed 26 November 2004.

¹¹⁴ Network Strategies Limited, *op cit.*, p. 20. Similar distinctions were raised in submissions to the review by Hutchison Telecoms, p. 5; Vodafone, p. 4; Optus p. 9; and Virgin Mobile Australia, p. 9.

- ‘passive’ or ‘push’ services that are not requested by the consumer. These may take the form of marketing distributed to consumers according to their whereabouts or they may take the form of ‘tracking’ services initiated by third parties interested in the location of other consumers. Network Strategies described an ‘asset tracing’ service to business customers, which would enable it to track the location of its physical assets.

An Australian example of a successful active location-based service is Loc3, which is offered over Hutchison’s WCDMA network, and enables real estate agents to access maps, aerial photos, histories, listings and appraisals of properties, and calculate distances to and from schools, transport or the like while on location with a potential vendor.¹¹⁵

ChildLocate is an example of a passive location-based service that is currently available in the United Kingdom. It allows parents to find the location of their children’s mobile handset. The service is also available to those other than parents. In order to use the service, the parent, or other user, must provide a credit card number and valid UK address and a unique password must be sent by SMS from the child’s handset. The child can suspend the service at will and is always able to see who has the ability to check their location.¹¹⁶ According to ChildLocate, the accuracy of the service varies because of the size of cells. In urban areas, ChildLocate claims that the service is accurate to between 150 and 400 metres, in suburban areas between 450 m and two km, and in rural areas between 1.5 and nine km.¹¹⁷

¹¹⁵ See Network Strategies Limited, op cit., p. 25 and www.loc3.com, viewed 20 November 2004.

¹¹⁶ Further information on Child Locate can be found in Network Strategies, op cit., pp. 24–5.

¹¹⁷ See www.childlocate.co.uk/accuracy.html

Box 6.1: Mobile Location Information Technologies¹¹⁸

Cell ID

The simplest and least accurate form of location information is that provided by cell identification. By this method, the network locates consumers only within the network cell by which they are currently being serviced. The accuracy of the information provided is dependent on the size of the cell. Cell ID can be used across all networks.

Additional technologies can identify, within a large margin of error, the distance of the user from the cell transmitter, by measuring the time a signal takes to travel between the handset and transmitter.¹¹⁹ However, this is an inexact measurement and cannot measure the direction of the signal. The addition of cell sector technology can break down a cell into quadrants, thereby providing an estimated direction from the transmitter.

Triangulation

Newer technology, known as Enhanced Observed Time Difference (E-OTD) in GSM/GPRS networks and Observed Time Difference of Arrival (OTDOA) in WCDMA networks, can triangulate the position of a user by measuring time and direction of signals between at least three adjacent cells and the handset. The implementation of E-OTD requires upgrades to the network, although all handsets are E-OTD capable. The accuracy of E-OTD and OTDOA is reported as between 100 and 500 metres in two dimensions.

With respect to CDMA networks, triangulation can be achieved using Advanced Forward Link Trilateration (AFLT). AFLT roll out requires a software upgrade on the handset, and is quoted as being accurate to between 50 and 200 metres.¹²⁰

Assisted Global Positioning System

The most precise location information currently available is captured through Assisted Global Positioning System (A-GPS). Like a traditional GPS, A-GPS uses a triangulated signal between geostationary satellites. The assisted part of the system is the use of a location server, which speeds the triangulation significantly, resides in the cellular network and demodulates and calculates the final position. The accuracy of A-GPS is quoted as accurate to between 5 and 50 metres and works in three dimensions.

Implementation of A-GPS requires handsets to include an A-GPS receiver, although the network requires only software upgrades.

¹¹⁸ The information in this box is taken from SnapTrack, *Location Technologies for GSM, GPRS and UMTS Networks*, Qualcomm, California, 2003.

¹¹⁹ Timing Advance (TA) in GSM/GPRS networks and Round-Trip Time (RTT) in UMTS networks.

¹²⁰ Openwave,

developer.openwave.com/omdt/docs/location_studio_sdk/pdf/Intro_to_Location_Technologies.pdf, viewed 26 November 2004.

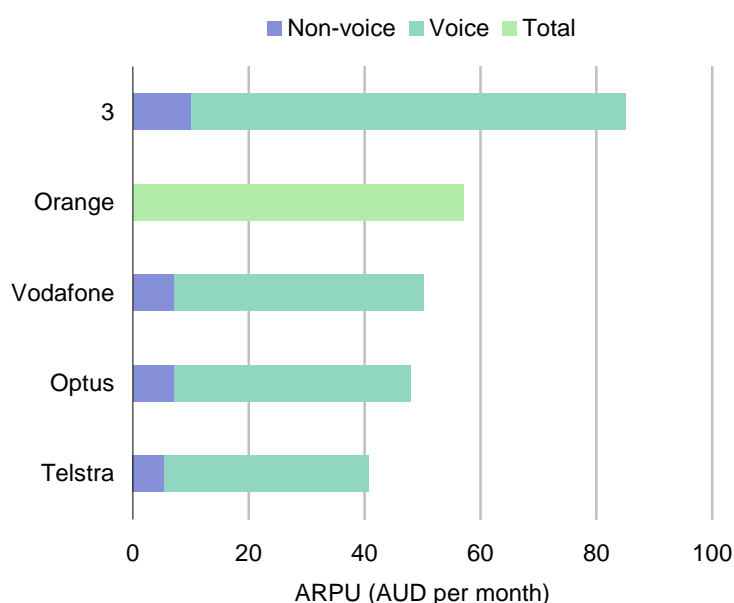
6.6 Commercial importance of data services and audiovisual content

While the Australian mobile telephony sector has continued to grow; both in terms of subscriber numbers and revenue,¹²¹ Network Strategies argued that tariffs for mobile CSPs are falling and that monthly minutes-of-use are either flat or declining.¹²² In this context, mobile CSPs are looking to identify new revenue streams so as to achieve continued growth. Data services and new audiovisual content offer that potential.

According to Network Strategies, data revenues in 2004 accounted for between 11.8 per cent and 15 per cent of CSPs' average revenue per user (ARPU).¹²³ This is represented in terms of monthly ARPU in figure 6.3 below. Underlining the importance of SMS, between 80 and 90 per cent of these revenues came from messaging. The ACA, cited by the Allen Consulting Group, noted that the number of SMS messages sent in the year to June 2003 grew 44 per cent over the previous year.¹²⁴

Figure 6.3: Monthly ARPU by operator, 2004.

Source: Network Strategies Limited, *op cit.*, p. 10.



It has been suggested that SMS was the 'first wave' in the take-up of data services for users of mobile devices. Network Strategies, citing Analysis Consulting, estimated the mobile content market in Western Europe would grow from €3.4 billion in 2003 to €9.7 billion in 2008. This would suggest an increase in the share of non-voice revenues from 20 per cent to 43 per cent over the same time period.¹²⁵

¹²¹ Allen Consulting Group, 2004, *op cit.*, pp. 20 and 13.

¹²² Network Strategies Limited, *op cit.*, pp. 8–9.

¹²³ *Ibid.*, p. 9.

¹²⁴ Allen Consulting Group, 2003, *op cit.*, p. 22.

¹²⁵ *Ibid.*, pp. 35–36.

The Allen Consulting Group broadly concurred with this assessment and highlighted the importance of non-voice revenues in mature markets, suggesting that:

- in saturated Asian markets, such as Hong Kong, Singapore, South Korea and Taiwan,, operators are focussing their efforts to increase revenue from value-added services¹²⁶; and
- in the European market, while suffering a decrease in the ARPU from voice, operators are recording significant increases in data revenue.¹²⁷

It has been suggested that the Australian mobile content market lags behind Europe by between one and two years,¹²⁸ which would suggest that the mobile content market in Australia is on the verge of substantial growth. Analyst Frost and Sullivan agreed that this was the case and predicted that the Australian mobile content market would increase from \$129 million in 2004 to \$1.015 billion by 2009.¹²⁹ The estimated growth of the broader non-voice market in Australia can be seen at figure 6.2 above (in section 6), and Network Strategies cited figures that seem to suggest burgeoning growth:

As at 31 March 2004, there were 56 000 active Vodafone live! subscribers (2.3% of Vodafone customers)—by June this had increased to over 100 000 active subscribers. The Optus Zoo content portal had 860 000 subscribers as at 30 June 2004 (15% of all Optus customers).¹³⁰

Mobile CSPs all agreed that audiovisual content services have a vital role to play in the market into the future. Hutchison suggested that ‘content and communication services are a key point of differentiation in the mobile market’.¹³¹ Similarly, Vodafone noted that:

...the high level of competition in the Australian mobile services market is a key driver of innovation and growth. The commercial viability of the delivery platforms will be, in large part, dependent on the types of content supported and available on those platforms. The continued development of current and future product and services is essential, regardless of the means of delivery or underlying technology, and the commercial underpinning.¹³²

These views were mirrored by the submissions of Optus, which noted in particular the importance of the range of services offered and the role of consumer demand in shaping their success or otherwise,¹³³ and Virgin Mobile Australia which while noting that as an MVNO it has not made investment in infrastructure, note that the potential revenues for data that are facilitated by new platforms has driven their introduction.¹³⁴

¹²⁶ Allen Consulting Group, 2004, op cit., p. 30.

¹²⁷ Ibid, p. 33.

¹²⁸ Network Strategies, op cit., p. 26.

¹²⁹ Cited in ‘The mobile content hockey stick?’, *Competitive Carrier*, 11 June 2005, p. 3.

¹³⁰ Ibid.

¹³¹ Hutchison Telecoms, submission to the review, p. 8.

¹³² Vodafone, submission to the review, p. 7.

¹³³ Optus, submission to the review, p. 15.

¹³⁴ Virgin Mobile Australia, submission to the review, p. 6.

7 BUSINESS MODELS AND COMMERCIAL ARRANGEMENTS FOR MOBILE CONTENT

Previous sections of this report have discussed the technological developments that are enabling access to essentially the same content services through a variety of communications platforms and, potentially, through a single device. These developments are leading to changes in the commercial strategies of players in the content development, broadcasting and telecommunications industry sectors worldwide, and to the emergence of new market structures.

This section of the report discusses the business models that underpin the availability of rich audiovisual content to mobile convergent devices. These include:

- premium rate services delivered by way of calls to specific telephone number ranges;
- mobile CSP content portals;
- third party content accessed through CSP content portals; and
- non-operator content portals.

The portal model for content delivery is becoming widespread in the mobile environment but could also operate in relation to fixed devices such as PCs. In fact, some commentators have suggested that the transition to a fully broadband fixed environment will lead to industry rationalisation and to a situation in which a far smaller number of ISPs seek competitive advantage by offering their subscribers value-added services using the portal model.¹³⁵

The OECD suggested that users are more willing to pay for content accessed via mobile platforms when compared to other online content, because:¹³⁶

- consumers are more accustomed to paying for services on mobile phone and the attitude that content is and should be, free is not as prevalent in the mobile environment as it is on the Internet; and
- until recently, much of the content available was simpler and was not resource-intensive (text, audio or still image) and therefore less expensive to produce.

Mobile content has been available at a relatively low price point, which has encouraged a base of consumers that may be ready to pay more for enhanced services, whether over mobile or other platforms.

At this stage, however, there seems to be greater utilisation of the portal model in the mobile environment, perhaps because consumers are more willing to pay to access content on their phone handset than they are on devices that they generally use to access the freely available Internet.

¹³⁵ See, for example, BuddeCom, *Global Triple Play: IP, Broadband and Digital TV*, Paul Budde Communications, Bucketty, 2005.

¹³⁶ Working Party on the Information Economy, *Digital Broadband Content: Mobile Content – New Content for New Platforms*, OECD, Paris, 2005, DSTI/ICCP/IE(2004)14/FINAL, available at www.oecd.org/dataoecd/19/7/34884388.pdf, viewed 10 May 2005.

7.1 Business models

7.1.1 Premium rate

Premium rate services are voice, text and audiovisual services that provide information and entertainment content at a rate higher than the cost of a normal phone call. They are also used to run competitions or to provide a means of voting for contestants on television programs. In the latter capacity they have provided a form of interactivity with broadcast content that has proved highly popular and delivered new revenue streams to broadcast content developers and media operators.¹³⁷ According to analyst AT Kearney, ten per cent of mobile phone users used their handsets for voting applications in 2004.¹³⁸

Premium rate services are accessed through calls to particular number ranges (often short, easy to remember numbers) where the charge for content or application accessed is billed through the user's telephone bill or pre-paid account. Commercial arrangements between the network operator and the content or application service provider establish a billing mechanism in exchange for a share of revenue gained.

In Australia, there are currently two forms of premium rate services:

- voice or facsimile calls to the 190x number range; and
- SMS and MMS calls to the 19x number range.

The communications platform that underpins the 190x number range is operated only by Telstra. Developed to provide audio services including telephone sex services, it has more recently been used to provide users with the ability to dial a premium rate service and order audiovisual content to mobile handsets. The content that is provided in this manner is predominantly personalisation content.

Premium rate SMS and MMS services are a relatively new development. In March 2003, the ACA released certain premium rate numbers on a trial basis. The long term numbers on the 19x range were released in May 2004, but the numbers allocated to adult services (195 and 196) may not be used without the application of appropriate consumer protection measures.¹³⁹

The ACA describes premium rate SMS as follows:

Premium rate SMS are popular for competition entries and voting for interactive TV shows, but can also be used to access sporting results, weather forecasts and astrology services as well as enabling m-commerce, the purchase of low-cost commodities such as paying for parking or soft drinks and acquiring ring tones and mobile-based games billed to the customer's mobile service.¹⁴⁰

¹³⁷ See Free TV Australia, submission to the review, p. 5. See also Australian Film Commission, submission to the review, p. 5.

¹³⁸ AT Kearney, *Mobinet Index 2004 Survey Extracts*, AT Kearney, London, 2004, p. 15.

¹³⁹ ACA (Service Provider Determination) Direction 2004 (No 2), paragraph 4(c).

¹⁴⁰ ACA, *Premium Services*, ACA, Melbourne, June 2004, p. 4.

www.aca.gov.au/telcomm/premium/191_9_and_pn_discussion_paper.rtf, viewed 23 November 2004.

The revenue breakdown of premium rate SMS in its first six months, according to Optus and cited by Australian communications analyst, BuddeComm, was:

- 60 per cent content downloads (personalisation content);
- 20 per cent promotions, voting;
- 15 per cent chat; and
- five per cent information, alerts and news subscriptions.¹⁴¹

As noted above, Telstra's premium rate 190x voice platform has been utilised to deliver audiovisual content.¹⁴² Notwithstanding the availability of premium rate SMS and MMS numbers, the 190x business model remains popular with some content providers for reasons that might include:

- legacy systems designed specifically for the 190x platform;
- simple interface between content provider and network operator - one operator in the case of 190x, several, each with different network configurations, in the case of 19x; and
- differing commercial arrangements between the content providers and the mobile CSPs.

7.1.2 Content portals

The mobile CSPs all have, or plan to introduce, their own content portals accessed by means of GPRS/1xRTT or 3G technologies.¹⁴³ These portals contain text or, increasingly, graphics-based menus for accessing content that is generally delivered to the handset using Internet protocol.

Portal content currently ranges from text-based information updates containing limited graphics or audio, through audiovisual personalisation content and games, to media-rich content such as video clips. An outline of the Australian mobile CSPs' content offerings is at section 6 (services).

In submissions to the review, CSPs suggest three business models for content portals:¹⁴⁴

- mobile CSP content portals;
- third party content accessed through operator content portals; and
- non-operator content portals (accessed through the open Internet).

¹⁴¹ BuddeComm, *Australia - Mobile Data - SMS - Overview, Trends, Developments*, November 2004, p. 3.

¹⁴² See ABA/ACA, joint submission to the review, pp. 14–15.

¹⁴³ Network Strategies Limited, *op cit.*, pp. 49–50. See also submissions to the review by the Media Entertainment and Arts Alliance, pp. 7–8; Hutchison Telecoms, pp. 4–5; Optus, pp. 7–10; Virgin Mobile Australia, pp. 4–6; Vodafone pp. 2 and 6–7; and ABA/ACA, pp. 9–10.

¹⁴⁴ See for example, submissions to the review by Hutchison Telecoms, pp. 7–8; Optus, pp. 11–13; Virgin Mobile Australia, p. 6; and Vodafone, p. 6. Optus, however, drew further distinctions based on the level of technical involvement that Optus had in the content's provision.

In the case of mobile CSP content portals, carriers either develop their own content or specifically select content that they market and make available under their own brand. Where they use externally developed content, they would have purchased rights to use that content. Consumers generally are able to access their CSP's portal without a subscription or other payment but are charged for access to some content accessed in addition to carriage fees.

Where mobile CSPs provide third-party content, they generally contract content providers to offer content services to which they provide access through their own portal and for which the consumer is charged on their telephone bill. As in the case of the premium rate model, the content provider acquires a billing mechanism in exchange for a share of content revenue. In this case, the CSP probably would not monitor content but would be able to make contractual requirements about the content provided.

According to Network Strategies, the proportion of content revenue retained by the CSP under this model could be anywhere from 33 to 85 per cent.¹⁴⁵ Citing Analysys Research from the United Kingdom, Network Strategies noted that 'content rights owners, developers and publishers can be expected to share up to 31 per cent of total consumer spend, with the operator typically taking the remainder'.¹⁴⁶

The notable exception to this type of revenue share arrangement is the i-mode service model which has been introduced in Australia by Telstra. Under this model, which was developed by NTT DoCoMo in Japan, the mobile CSP retains nine per cent of the content revenue, disbursing the rest to the content provider and other content rights holders.¹⁴⁷ There is no standard charge for content services under i-mode because individual content providers set their own rate, usually on a subscription basis.¹⁴⁸ As with all models, the CSP retains all carriage charges.

Content providers may also offer services or applications that are accessed using a mobile handset but for which the consumer is not charged (except for carriage) on their telephone bill. In this case, the business model is the same as services on the Internet where consumers pay for the service by means of credit card or alternative payment systems. The CSP derives only carriage revenue from the transaction, has no contractual arrangement with the content provider and cannot control the content accessed.

Figure 7.1 below from Network Strategies provides a categorisation of business models for the supply of mobile content. In this context, the term 'kiosk' refers to third party content accessed through operator portals.

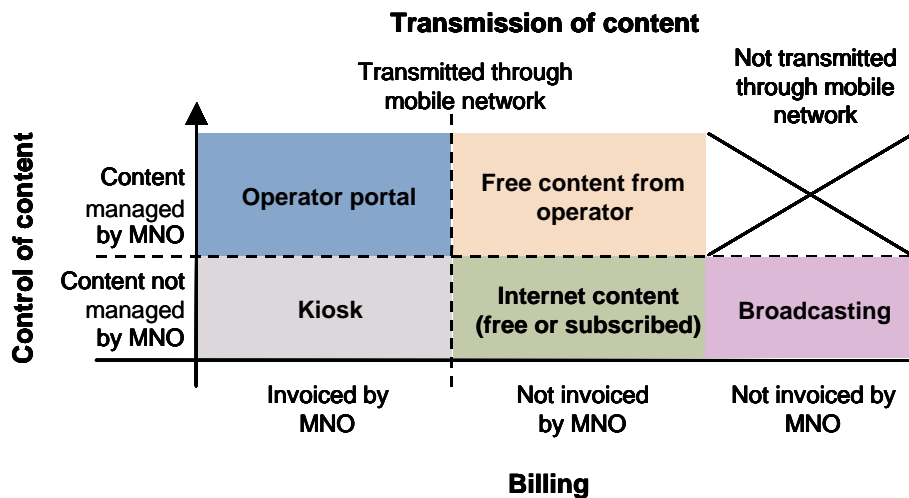
¹⁴⁵ Network Strategies Limited, op cit., p. 66.

¹⁴⁶ Ibid., p. 65. Analysys Research described the overall breakdown as 17 per cent rights and development, 14 per cent publishing, 14 per cent portal and service marketing, 14 per cent transaction management and 40 per cent network access, and noted that all but the first two shares reside with the CSP for operator portal content (ibid., pp. 65–66).

¹⁴⁷ Ibid., p. 64.

¹⁴⁸ Telstra, *Telstra Customer Terms: Mobiles Section Part G: Data Services*, paragraph 11.38. Available at www.telstra.com.au/customerterms/home_mobile_dataserv.htm, viewed 18 April 2005.

Figure 7.1: Categorisation of business models.
 Source: *Network Strategies Limited, op cit., p. 64.*



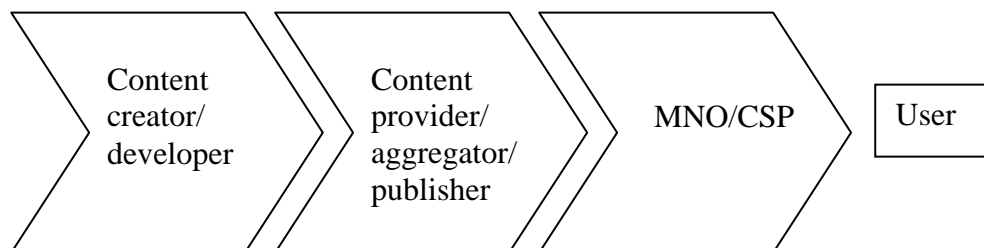
7.2 Mobile content value chain

The review received submissions from all of the Australian mobile network operators. In most cases, those submissions described the commercial arrangements that underpin their provision of content services to consumers. Vodafone noted that the value chain for content delivery is increasingly complex in that the value chain can vary depending on factors such as who produces the content, where it is hosted, who markets it, how it is accessed and who bills the customer.¹⁴⁹

Perhaps as a result of this complexity, content ‘aggregators’ have emerged as key players in the value chain for mobile content. In Australia, the 14 or so major aggregators provide a conduit between potentially hundreds of Australian and overseas content developers and the small number of mobile networks each of which have different network configurations. Content aggregators therefore act as distributors of content, importing content and services and providing them in the required technical form to the mobile CSPs for delivery to the consumer.

A simplified value chain for mobile content delivery is at figure 7.2 below.

Figure 7.2: Mobile content value chain



¹⁴⁹ Vodafone, submission to the review, pp. 4–5.

Australian aggregator, BlueSkyFrog, provides an example of the various roles of the content aggregator. BlueSkyFrog, which is a division of Legion Interactive, is one of Australia's largest content aggregators. It operates several content portals including:¹⁵⁰

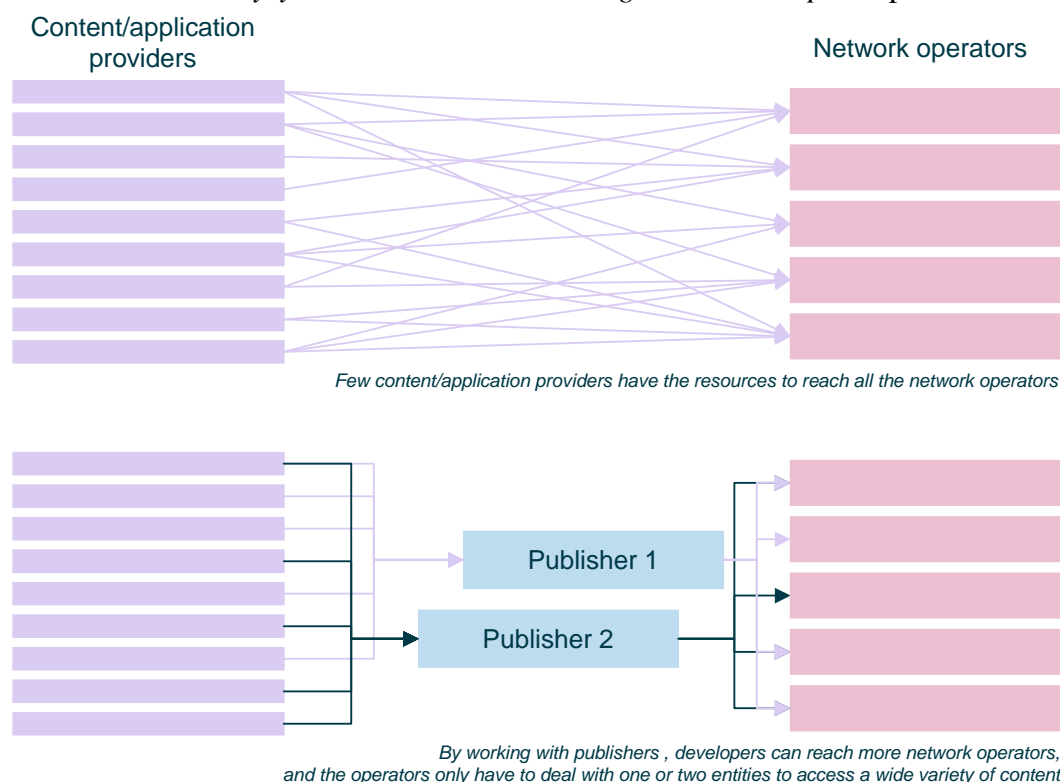
- the BlueSkyFrog-branded Internet site, which allows customers to purchase 'Bugz' with a credit card or via BPay. 'Bugz' are then used as 'currency' to purchase mobile content. Content can also be purchased via 190x premium rate platform;
- the BlueSkyFrog for Telstra <*telstra.bluskyfrog.com*>, MobileBabes <*www.mobilebabes.com.au*>, and the NineMSN white label Internet sites <*ninemsn.blueskyfrog.com*>, all of which allow customers to purchase content via the 19x and 190x premium rate platforms;
- the Zoo Arcade site, i-Mode site and the Telstra WAP sites, which have reverse-billing solutions. On these portals, the relevant carrier bills the subscriber when content is browsed and selected, and then provides BlueSkyFrog with a share of revenue and
- some content on Vodafone Live!, which is purchased by Vodafone from BlueSkyFrog and is then branded as Vodafone content.

As the BlueSkyFrog example suggests, the same content services may be available across a range of mobile networks but with different contractual arrangements managing its supply. The aggregator reformats the service for delivery across the differing mobile networks. This point is also made by Analysys Research in figure 7.3 below. In this figure, as in figure 7.2 above, the term 'publisher' is synonymous with aggregator which is more commonly used in the Australian market.

¹⁵⁰ Network Strategies Limited, op cit., pp. 90-92.

Figure 7.3: Role of the publisher

Source: *Analysys, cited in Network Strategies Limited, op cit., p. 60.*



It can be seen that, with the exception of non-operator portals, the value chain for mobile content delivery utilises the billing mechanisms developed traditionally for carriage charges. Contractual arrangements control the interaction between mobile CSPs and content providers or aggregators. These arrangements can include requirements about the type of content provided.

- Optus requires that content suppliers ‘must ensure the service complies with all applicable industry codes of practice necessary for the provision and use of the content in Australia’ and ‘reserves the right to remove or adapt the content at any time’ if it has ‘reasonable grounds to believe such content is obscene, offensive or in any way unsuitable for people under the age of 18 or if classified, it is likely to be classified as MA, X, R or RC’.¹⁵¹
- Vodafone is committed to ensuring that its partners and providers abide by the Vodafone Mobile Marketing Principles.¹⁵²
- Virgin Mobile Australia requires content providers to agree to abide by the Virgin Mobile Australia content guidelines.¹⁵³
- Telstra advises that it uses similar commercial arrangements to control the content it offers.

¹⁵¹ Optus, submission to the review, pp. 14-15.

¹⁵² Vodafone, submission to the review, p. 6.

¹⁵³ Virgin Mobile Australia, submission to the review, p. 6.

REGULATORY STRUCTURES

The terms of reference for the review require it to consider the extent to which existing regulatory approaches apply to the new and emerging audiovisual services and features of convergent communications devices. As part of that consideration, this part of the review report provides an overview of those approaches, particularly:

- the national classification scheme;
- broadcasting and online content regulation; and
- telecommunications premium rate services regulation.

It also reports on associated legislative measures in relation to interactive gambling, spam, privacy and consumer and competition regulation.

The application of the Criminal Code which directly underpins Australian Government policies on safety in the modern communications environment is also discussed.

8 CLASSIFICATION

The categorisation of content into different classification types that are readily understood by consumers is widely used internationally to promote informed choice by adults about the content they access and to limit the risk of exposure to inappropriate content by minors.

Cultural differences between countries lead to different standards of community acceptability which, in the context of convergent content, is leading to differentiated commercial strategies, sometimes by global players, on a country by country or regional basis.

8.1 The national classification scheme

In Australia, the national classification scheme is based on:

- the Australian Government *Classification (Publications, Film and Computer Games) Act 1995* (the Classification Act); and
- a cooperative agreement between the Australian, State and Territory Governments.

By these dual means, an Australian Government agency, the Office of Film and Literature (OFLC), decides the classification of content and the states and territories are responsible for enforcing the appropriate age restrictions.

The Classification Board and the Classification Review Board are the statutory bodies that, under the Classification Act, respectively classify and review classification decisions in relation to films, computer games and certain publications. The OFLC supports both boards.

The Classification Act contains a National Classification Code (the Code) and provides for the making of Guidelines for the Classification of Films and Computer

Games (the Classification Guidelines).¹⁵⁴ The Code sets out a number of principles that classification decisions are required to give effect to. These principles include:

- that adults should be able to read, hear and see what they want;
- that everyone should be protected from exposure to unsolicited material that they find offensive; and
- the need to take account of community concerns about depictions that condone or incite violence and the portrayal of a person in a demeaning manner.

The Australian and State and Territory Governments may vary the Code and the Classification Guidelines by agreement, which are reviewed periodically to ensure that they adequately reflect community standards.

8.1.1 Classification of film and computer games

Under the Classification Act, the matters to be taken into account in making a decision on the classification of a film or a computer game include:

- (a) the standards of morality, decency and propriety generally accepted by reasonable adults; and
- (b) the literary, artistic or educational merit (if any) of the publication, film or computer game; and
- (c) the general character of the publication, film or computer game, including whether it is of a medical, legal or scientific character; and
- (d) the persons or class of persons to or amongst whom it is published or is intended or likely to be published.¹⁵⁵

The classifications are ranked in a hierarchy of ‘impact’ that take into account the treatment in the film or computer game of ‘classifiable elements’ and also their cumulative effect. These include violence, sex, nudity and language.

Decisions on the classification categories are conveyed to consumers through the use of accessible symbols and consumer advice that are determined from time to time by the Director of the OFLC.






The current classification categories and their respective symbols for films and computer games are shown below at figure 8.1.

¹⁵⁴ OFLC, *Guidelines for the Classification of Films and Computer Games*, OFLC, Haymarket, 2005.

¹⁵⁵ Classification Act s.11, cited in OFLC, submission to the review, Annexure A.

Figure 8.1: Determined markings for films and computer games.

Source: Office of Film and Literature Classification, 2005.

<u>Impact</u>	<u>Determined Marking</u>
Very mild	 General
Mild	 Parental guidance recommended
Moderate	 Recommended for mature audiences
Strong	 Not suitable for people under 15. Under 15s must be accompanied by a parent or adult guardian
High (film only) ¹⁵⁶	 Restricted to 18 and over
Sexually explicit (film only) ¹⁵⁷	 Restricted to 18 and over

These authorised symbols are used to indicate the most suitable audience for the film or computer game and are a guide to the age-appropriateness of the material.

With respect to film content, the G, PG and M categories are ‘advisory’ categories, and do not legally restrict anyone from seeing or hiring the film. The MA15+, R18+ and X18+ categories are ‘legally restricted’ and age restrictions apply.

Of the advisory categories, G films are considered suitable for all viewers and, according to the OFLC, parents should feel confident that children can watch material

¹⁵⁶ There are no R18+ and X18+ classifications for computer games. Computer games that would be classified at a higher level than MA15+ are refused classification.

¹⁵⁷ X18+ is a special category, which contains real depictions of actual sexual intercourse and other sexual activity between consenting adults. X18+-rated films can only be available for sale or hire in the Australian Capital Territory or the Northern Territory.

in this classification. PG films may contain material that is confusing or upsetting to children, and therefore parental guidance is recommended for children under 15 years. The M category is recommended for children who are 15 years and over as they may contain material that is considered to be potentially harmful or disturbing to those under 15 years.

The MA15+ category is a legally restricted category. The OFLC explains that this is because the content in these films is stronger than M films and is more likely to be harmful or disturbing to those under 15. Children under the age of 15 years can see a film which has an MA15+ classification, but it is not recommended and they must be accompanied by a parent or adult guardian.

The R18+ classification is legally restricted to adults because of its high-level content. A person must be 18 years or over to see these films. Some material in this category may be offensive to sections of the adult community. The X18+ classification is a special category which contains sexually explicit material and is also restricted to adults 18 years and over. These films can only be legally sold or hired in the Australian Capital Territory and the Northern Territory.

Films (including videos and DVDs) which contain elements beyond those set out in the above classification categories are Refused Classification (RC). Films that fall outside these classification categories and meet the RC criteria cannot legally be brought into Australia without express permission from the Director of the OFLC. They cannot be sold, hired, advertised or exhibited in Australia.

As indicated by figure 8.1 above, MA15+ is the strongest impact classification permitted for computer games. Computer games with an impact above MA15+ would be refused classification.

For more information on the current classification categories and symbols for films and computer games see www.oflc.gov.au.

8.1.2 Classification of publications

Under the national classification scheme, distributors are required to submit publications (any written or pictorial matter that is not a film or computer game, or an advertisement for either) for classification only if they are ‘submittable publications’. Once a submittable publication has been classified, it must have the relevant consumer advice label attached to it. A ‘submittable publication’ is one that:

...having regard to the Code and the classification guidelines to the extent that they relate to publications, contains descriptions or depictions that:

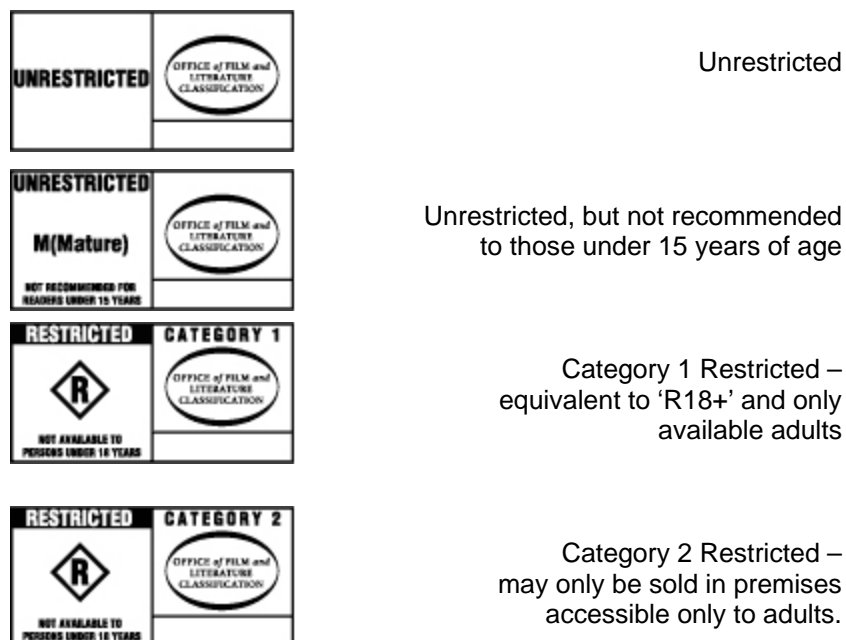
- (a) are likely to cause the publication to be classified RC; or
- (b) are likely to cause offence to a reasonable adult to the extent that the publication should not be sold or displayed as an unrestricted publication; or
- (c) are unsuitable for a minor to see or read.¹⁵⁸

¹⁵⁸ Classification Act s.5 cited in OFLC, submission to the review, Annexure A.

The current classification categories and consumer advice labels for submittable publications are shown at figure 8.2 below. The criteria for classification decisions of publication broadly equate to the criteria for film and computer games.

Figure 8.2: Publications labels

Source: *Office of Film and Literature Classification, 2004.*



The OFLC explains that publications which are classified ‘Unrestricted’ sometimes contain material that is not recommended for children. If this is the case, the publication will carry a consumer advice label that advises that the material is not recommended for readers under 15 years. As with film, there is the RC category, and publications which contain elements which exceed the other categories are classified RC. They cannot legally be sold in Australia.

8.1.3 Classification and new content services

In its submission to the review, the OFLC has stated its view that the Classification Act applies to any convergent content that falls within the definitions of ‘submittable publications’, ‘films’ or ‘computer games’ contained in the Act.¹⁵⁹ In this context, the breadth of the definition of ‘film’ contained in s.5 of the Classification Act should be noted:

‘film...includes a cinematograph film, a slide, video tape and any other form of recording from which a visual image, including a computer generated image, can be produced...’

Although the definitions of material classifiable under the Classification Act do not cover live material, once content is captured by way of a recording from which a visual image, including a computer generated image, can be produced, it falls within the broad definition of ‘film’.

¹⁵⁹ OFLC, submission to the review, p. 7.

The review accepts that the broad definitions of ‘film’, ‘computer game’ and ‘submittable publication’ under the Classification Act apply to such material stored on a device for commercial delivery. A convergent communications device would appear likely to be such a device. The review finds that the classification categories of the national classification scheme could sensibly be applied to audio-visual content on convergent communications devices which would have the benefit of applying a consistent approach to classification assessments across delivery platforms. **However the review finds that industry specific implementation would be optimal in the case of convergent content.**

8.1.4 Industry specific approaches

Within the national classification scheme, there is a facility for computer games manufacturers or distributors to be trained as accredited assessors by the OFLC and to make recommendations to the Classification Board on computer games classification decisions up to MA15+. An accredited assessor cannot make recommendations about MA15+ or RC classification decisions.

While music videos and DVDs fall within the definition of film under the Classification Act, recorded music per se is not subject to the national classification scheme. However, the Australian Record Industry Association (ARIA) and the Australian Music Retailers Association (AMRA) administer a self regulatory industry code of practice for the classification and labelling of recorded music that may contain offensive lyrics or themes.¹⁶⁰

The self-regulatory approach under the ARIA/AMRA Code is broadly aligned with the classification scheme for film, both in terms of underlying principles and classification categories and labels. The review understands that the OFLC provides support to the ARIA/AMRA approach through day-to-day consultation on classification assessments, and through the industry ombudsman scheme for escalated complaints handling.¹⁶¹ It also provided assistance in the development of a revised Code of Practice that was implemented in April 2003.

When introducing the online content scheme, which is discussed at section 10 below, the Australian Government was concerned to provide that Internet content regulation would be consistent with other content regulation applied to offline services in Australia. To this end, Internet content regulation was aligned with the regulation that applied to narrowcast subscription television services where, based on the national classification scheme, RC and X18+ material is prohibited and R18+ material is required to be restricted to adults.

Reflecting these different practical approaches to classification assessments, the OFLC suggested in its submission to the review that a range of models exist for the regulation of convergent content.¹⁶²

¹⁶⁰ The ARIA/AMRA code of practice and information relating to labelling of music is available at www.aria.com.au/pages/labelling-code.htm, viewed 15 March 2005.

¹⁶¹ OFLC, *Annual Report 2002-2003*, OFLC, Haymarket, 2003, pp. 55–6; OFLC, *Annual Report 2003-2004*, OFLC, Surry Hills, 2004, pp. 54, 57.

¹⁶² OFLC, submission to the review, p. 5.

The OFLC argues, however, that consumers will benefit from clear and uniform classification information across entertainment products and delivery platforms. It would be concerned about the impact that the introduction of alternative or proprietary classification systems would have on consumer recognition of the national classification scheme. **The review accepts these concerns and finds that any classification assessments or information about convergent content should be aligned with the classification categories under the national classification scheme. This would extend to the principles underlying classification assessments and the wording of the information about categories of content.**

On the basis of its examination of new and emerging convergent content services, however, **the review finds that such services would not be amenable to the strict application of the national classification scheme which requires the classification of all content.** This is because of the dynamic nature of the content, the number of content items likely to be involved, their time specific value and their rapid refreshment rate. Industry submissions to the review also point to the commercial burden that would be involved in the classification of all content, both in terms of the costs charged for the Classification Board decision and the delay involved in getting services to market.¹⁶³ **The review finds that an adapted model, which is nonetheless aligned with the national classification scheme, would be optimal in the mobile convergent environment.**

According to its submission, the OFLC already trains Classification Board and Review Board members, computer industry assessors and Australian Customs and law enforcement officers about classification.¹⁶⁴ Many classifiers of television content have also been Classification Board members.¹⁶⁵ **In this context, the review finds that persons undertaking classification assessments with respect to convergent content should be required to complete OFLC training and periodic refresher courses. Procedures would also be required to provide that classification assessments are appropriately and accurately applied.**

In finding an adapted approach to be optimal, the review accepts that only material formally classified by the Classification Board should carry the Classification Act categories and determined markings or symbols.

¹⁶³ Virgin Mobile Australia, submission to the review, p. 8; and Hutchison Telecoms, submission to the review, p. 11. Other mobile CSPs supported the use of the classification scheme as the basis for an assessment model that would not require classification of all content—see Optus, submission to the review, p. 19; and Vodafone, submission to the review, p. 8.

¹⁶⁴ OFLC, submission to the review, p. 2.

¹⁶⁵ Ibid.

9 BROADCASTING CONTENT REGULATION

The *Broadcasting Services Act 1992* (BSA) sets the regulatory framework for broadcasting, datacasting and Internet content in Australia. It is relevant to the review because it:

- establishes the regulatory approach to offline audiovisual media and it has been a consistent policy principle of the Australian Government that there should be consistency between offline and online content regulation;
- establishes the online content scheme for Internet content regulation that is discussed in part 10 of the report below; and
- may already provide a regulatory framework for services such as the Optus Zoo TV service and prospective digital broadcasting to mobile devices through technologies such as DVB-H.

The approach to content regulation under the BSA is co-regulatory. Legislation underpins the development of industry codes of practice that were registered by the ABA and enforced by ACMA, which is the independent statutory regulator.

The obligations that are imposed on broadcasting licensees vary according to the nature of the service offered, reflecting the policy set out in s.4 of the BSA that:

- different levels of regulatory control be applied across the range of broadcasting services according to the degree of influence that different types of broadcasting services are able to exert in shaping community views in Australia; and
- broadcasting services in Australia be regulated in a manner that, in the opinion of ACMA, enables public interest considerations to be addressed in a way that does not impose unnecessary financial and administrative burdens on providers of broadcasting services.

9.1 Broadcasting services

Under the BSA, a broadcasting service is one that delivers television or radio programs to persons with appropriate equipment for receiving that service. The definition is expressed broadly and in terms that are technologically neutral. There are only a limited number of exclusions to the definition of a broadcasting service:

- (a) a service that provides no more than data, or no more than text (with or without associated still images);
- (b) a service that makes programs available on demand on a point-to-point basis, including a dial-up service; or
- (c) a service or class of services that the Minister determines not to fall within the definition.¹⁶⁶

On 12 September 2000, the then Minister for Communications, Information Technology and the Arts made a determination under paragraph (c) above (the

¹⁶⁶ BSA subsection 6(1).

Internet Streaming Determination), that excludes from the definition of a broadcasting service:

a service that makes available television programs or radio programs using the Internet, other than a service that delivers television programs or radio programs using the broadcasting services bands.¹⁶⁷

9.1.1 Common regulatory requirements

While there are variations in the regulatory obligations on different types of broadcasting services under the BSA, there are nonetheless objects that apply consistently across all broadcasting services regulation, including:

- (h) to encourage providers of broadcasting services to respect community standards in the provision of program material; and
- (j) to ensure that providers of broadcasting services place a high priority on the protection of children from exposure to program material which may be harmful to them.¹⁶⁸

It is also an object of the BSA to provide a regulatory environment that will facilitate the development of a broadcasting industry in Australia that is efficient, competitive and responsive to audience needs.¹⁶⁹ To this end, Australia has a co-regulatory system in which broadcasters comply with codes of practice that are developed by the broadcasting industry sectors in consultation with members of the public.¹⁷⁰ ACMA is responsible for registering the codes, for monitoring compliance and for investigating unresolved complaints.

Under the BSA, all broadcasting industry sectors are prohibited from providing content that has been classified X18+ or refused classification by the Classification Board.

Further, specific requirements that may be addressed in the development of all industry sector codes of practice include:

- (a) preventing the broadcasting of programs that, in accordance with community standards, are not suitable to be broadcast by that section of the industry; and
- (b) methods of ensuring that the protection of children from exposure to program material which may be harmful to them is a high priority; and
- (c) methods of classifying programs that reflect community standards.¹⁷¹

¹⁶⁷ *Broadcasting Services Act 1992: Determination under paragraph (c) of the definition of 'broadcasting service' (No. 1 of 2000)*, 12 September 2000.

¹⁶⁸ BSA subsection 3(1).

¹⁶⁹ BSA paragraph 3(1)(b).

¹⁷⁰ Paragraph 3(1)(i) provides for the development of a complaint-based system to be an object of the BSA.

¹⁷¹ BSA subsection 123(2). The classification of films must apply the national classification system administered by the OFLC (BSA paragraph 123(3C)(a)).

In developing codes of practice, representative industry groups must take into account community attitudes towards a range of matters, including the portrayal of violence, sexual conduct, nudity and offensive language.¹⁷² ACMA will only register an industry code if it is satisfied it provides appropriate community safeguards, is endorsed by the majority of broadcasters and that members of the public have had an adequate opportunity to comment.¹⁷³

The broadcasting industry codes include complaints procedures for dealing with concerns about programming matters. Specific complaints about a program are to be made to the broadcaster in the first instance. This allows broadcasters to be directly accountable for their programming decisions and promotes awareness of and responsiveness to community concerns. If the complaint is not answered within 60 days, or not answered to the satisfaction of the complainant, it may be referred to ACMA. ACMA will assess the complaint and determine whether or not there has been a breach of the code.

If ACMA considers that a code does not provide appropriate community safeguards, does not address the stipulated matters, or that there is no appropriate industry body, it has the power to make an industry standard to address such deficiencies.¹⁷⁴

The national broadcasting services, the ABC and the SBS, operate independently of Government under their own legislation. However, the ABC and SBS are required to submit codes of practice to ACMA, which uses them to assess complaints against the national broadcasters.

In its submission to the review Optus suggested:

- that the commercial arrangements for the delivery of mobile CSP portal content to convergent communications devices are similar to those found in the subscription television sector; and
- that its Optus Zoo TV CNNi service is a narrowcast service.¹⁷⁵

The following sections detail the particular obligations with respect to content that are placed on those broadcasting industry sectors.

9.1.2 Subscription television

As with all broadcasting services in Australia, programs classified X18+ or RC are prohibited on subscription television services.¹⁷⁶

The Subscription Television Broadcast Code developed by the Australian Subscription Television and Radio Association (the ASTRA Code)¹⁷⁷ was last revised in July 2003. It provides that licensees will apply the Classification Guidelines issued by the OFLC to all films and drama programs.

¹⁷² BSA subsection 123(3).

¹⁷³ BSA subsection 123(4).

¹⁷⁴ BSA s.125.

¹⁷⁵ Optus, submission to the review, pp. 18–20.

¹⁷⁶ BSA Schedule 2, paragraph 10(1)(f).

¹⁷⁷ Available at www.astra.org.au/article.asp?section=4&option=3#29, viewed 17 March 2005.

The business model for subscription television services is to provide a large number of channels seeking to address a diverse range of consumer preferences. Subscription television penetration, however, is around 27 per cent of Australian households.¹⁷⁸

The regulatory framework for subscription television services recognises that these factors result in subscription television broadcasters having only limited capacity to shape community views in Australia.

It also recognises that there is a different relationship between the service provider and the subscriber in this sector than in the commercial free-to-air television broadcasting sector. The ASTRA code, in its preamble, notes that:

A major distinctive feature of subscription television is the direct contractual relationship between the service provider and the subscriber. This voluntary relationship between the provider of a retail service and a subscriber to that service provides subscribers with freedom of choice along with the capability and responsibility to select the programs they wish to receive.

As a result, the regulatory controls on subscription television broadcasters are more permissive than those applying to the commercial free-to-air television sector. For instance, commercial free-to-air services are subject to time zone restrictions and may not broadcast R18+ classified programs without modification. By comparison, subscription television services are not required to observe programming time zones and may provide access to programs meeting an R18+ classification provided that access to such programs is restricted by a ‘disabling device’ that has been accepted by ACMA.¹⁷⁹

Moreover, the ‘eligible drama’ expenditure requirement that is imposed on subscription television licensees recognises the commercial arrangements that underpin the subscription television sector. Generally, subscription television broadcasters distribute programming which has been compiled into channels of programs by ‘channel providers’. Subscription television broadcasters tend not to purchase, commission or produce individual programs themselves. It is generally the channel provider that deals directly with program producers and distributors while the broadcasters distribute and sell the channels to consumers. The review notes that this model is similar to that used by mobile CSPs providing content portals by sourcing services that are packaged by aggregators.

Under Division 2A of Part 7 to the BSA, it is a licence condition of the subscription television licensee that at least 10 per cent of the total program expenditure on a drama service is expenditure on ‘new eligible drama programs’. An eligible program is an Australian program, an Australian/New Zealand program, a New Zealand program or an Australian official co-production.

The eligible drama requirement recognises that drama channel program expenditure can be incurred by licensees, channel providers (i.e. providers that package a channel and supply it to the licensee) and pass-through channel providers (i.e. channel providers not based in Australia).

¹⁷⁸ www.astra.org.au/article.asp?section=2&option=1&content=1, viewed 18 April 2005.

¹⁷⁹ BSA, Schedule 2, paragraph 10(1)(g).

The legislation places the responsibility for the minimum 10 per cent new eligible drama expenditure requirement on the channel provider in the first instance. The licensee has limited control over channel provider expenditure but it is a condition of the licensee's license that the obligation is met. Therefore, the scheme anticipates there may be a 12-month lag in expenditure to allow ACMA to inform the licensee of any shortfall incurred by its channel providers and to enable the licensee to ensure any shortfall expenditure is made up in the next year.

On the basis of its examination of the commercial arrangements that underpin convergent content services, the review accepts that, in the provision of mobile CSP portal content, the relationship between CSPs and content providers and/or aggregators is similar to the relationship between subscription television licensees and channel providers. Given this, the review considers that a similar regulatory model would be appropriate. **The review finds, therefore, that mobile CSPs and content providers/aggregators should be severally responsible for meeting these regulatory obligations.**

9.1.3 Narrowcast services

Narrowcasting services, which are a category of broadcasting services,¹⁸⁰ were introduced in 1992 to assist in achieving the object of diversity of television and radio services. Their introduction was aimed at facilitating a range of niche services such as educational, business, ethnic and professional services which had previously been restricted under the *Broadcasting Act 1942*.

Narrowcasting services are so named because their reception is limited:

- (i) by being targeted to special interest groups; or
- (ii) by being intended only for limited locations, for example, arenas or business premises; or
- (iii) by being provided during a limited period or to cover a special event; or
- (iv) because they provide programs of limited appeal; or
- (v) for some other reason.¹⁸¹

There are two types of narrowcast services—subscription and open. Subscription narrowcast services are commercially provided and are available only to subscribers. Open narrowcast services are freely accessible within the narrowcaster's transmission area.

Narrowcast services are regulated through a class licence system which does not involve allocation of licences to individual service providers. Once they have obtained an appropriate transmitter license allocated under the *Radiocommunications Act 1992*, narrowcasters can provide their service as long as they observe the conditions of the class licence determined by ACMA.

¹⁸⁰ BSA s.11.

¹⁸¹ BSA sections 17 and 18.

By comparison with other broadcasting services, narrowcasters are subject to minimal regulation under the BSA. Under Part 7 of Schedule 2 to the BSA, however, open and subscription narrowcasting television services are prohibited from broadcasting programs classified X18+ or RC. Open narrowcasters are also prohibited from providing R18+ classified programs that have not been modified to make them suitable to broadcast.

In its submission to the review, Optus argues that it provides CNNi on its Optus Zoo TV service by way of a subscription narrowcast license because:

the service is limited either in appeal or as they [sic] can only be accessed by a limited number of people who have an appropriate handset and conditional access which enables those programs to viewed.¹⁸²

Based on information provided to the review by Optus, the review understands that consumers access the service by navigating through the menus of the Zoo portal, selecting ‘live TV’, and then choosing the channel they wish to view. The Optus Zoo TV service is then transmitted to consumers’ handsets over the GPRS network on a point-to-point basis.

In its submission to the review, Optus argued that its Zoo TV service was already regulated—either as a retransmitted national broadcasting service, or a subscription television narrowcast service—under the BSA. Other submissions to the review concurred with this position.¹⁸³ The obligations of broadcasters with respect to appropriate content that are imposed by the BSA are well understood by industry and, generally, also by consumers. In this context, the review accepts that the framework for the regulation of broadcasting services could provide appropriate consumer protections with respect to the channels available on the Zoo TV service. However it is not clear that this kind of service falls clearly within the scope of the BSA. The review notes submissions which suggest any uncertainty should be removed.¹⁸⁴

¹⁸² Optus, submission to the review, p. 8.

¹⁸³ See submissions to the review by Free TV Australia, p. 10; and Australian Film Commission, pp. 9–10.

¹⁸⁴ See submissions to the review by Free TV Australia, p. 10; and Australian Film Commission, pp. 9–10.

10 INTERNET CONTENT REGULATION

The online content scheme, which has been in operation since 1 January 2000, is established by Schedule 5 to the BSA. It was introduced in response to community concern about the accessibility of illegal and inappropriate Internet content, particularly to children.

As set out in s.3 to the BSA, the objects of the scheme are to:

- provide a means for addressing complaints about certain Internet content;
- restrict access to certain Internet content that is likely to cause offence to a reasonable adult; and
- protect children from exposure to Internet content that is unsuitable for children.

Schedule 5 is premised on the principle that what is illegal offline should also be illegal online. It does not provide for more onerous restrictions than those that apply to other media regulated under the BSA. Definitions of prohibited material in Schedule 5 are based on specific criteria of the national classification scheme.

Clause 1 of Schedule 5 outlines the key elements of the scheme.

- The regulation of ISPs and ICHs in Schedule 5, including through industry codes of practice and a complaints mechanism.
- State and territory laws that impose obligations on producers of content and persons who upload or access content, and the Commonwealth Criminal Code which makes it an offence to intentionally use an Internet carriage service to menace or harass another person, or in such a way as would be regarded by reasonable persons as offensive.¹⁸⁵
- Non-legislative measures including community education.

In adopting this three-pronged approach to online safety and access to inappropriate content on the Internet, the Australian Government has recognised the inherent difficulties in attempting to regulate the international, dynamic and largely free Internet. There can be no one, failsafe measure to ensure that Australians experience only the benefits and none of the risks of Internet connectivity.

The online content scheme is posited on the fact that, without notification of that content, ISPs and ICHs lack the ability to control the content accessed by consumers on the Internet. In this context, industry co-regulation and technological solutions can be only a partial solution to the issue of children's access to inappropriate content on the Internet. The online content scheme recognises the important role of adult supervision and household rules in managing the access of minors to inappropriate content. It also recognises explicitly the role of community education in assisting consumers to manage their own Internet experience and that of their children.

This section of the report outlines the co-regulatory complaints-based process established by Schedule 5 and the role of community education in promoting a safer

¹⁸⁵ The Criminal Code is contained in the Schedule to the *Criminal Code Act 1995*.

Internet experience for consumers. The provisions of the Criminal Code are discussed separately at section 12 below.

10.1 Schedule 5 to the BSA

A statutory review of the operation of Schedule 5 that was conducted by DCITA and released by the then Minister for Communications, Information Technology and the Arts on 13 May 2004, found that there was clear support for the online content scheme.¹⁸⁶ Aspects of the scheme receiving greatest support at that time included:

- the complaints mechanism administered by the then ABA;
- the referral of ‘sufficiently serious’ material to the relevant police authorities or counterpart overseas hotlines;
- the co-regulatory framework, which includes industry codes of practice;
- community education as a key element of the scheme; and
- international liaison, particularly with the European hotline forum The Association of Internet Hotline Providers and the Internet Content Rating Association.

10.1.1 Regulatory policy

As discussed in section 9 above, s.4 of the BSA sets out Parliament’s intention that different levels of regulatory control be applied across the range of broadcasting, datacasting and Internet services according to the degree of influence the services are able to exert in shaping community views in Australia.

With specific regard to Internet services, s.4 also sets out Parliament’s intention that Internet content hosted in Australia, and Internet carriage services supplied to consumers in Australia, be regulated in a manner that:

- enables public interest considerations (particularly those relating to inappropriate Internet content) to be addressed in a way that does not impose unnecessary financial and administrative burdens on ISPs and ICHs;
- readily accommodates technological change;
- encourages the development of Internet technologies and their application and the provision of services made practicable by those technologies to the Australian community; and
- encourages the supply of Internet carriage services at standards that reasonably meet the social, industrial and commercial needs of the Australian community.

¹⁸⁶ DCITA, 2004, op cit., p.2. The report is available for download at www.dcita.gov.au/broad/online_content_and_gambling_regulation/online_content_regulation/a_revie_w_of_schedule_5_to_the_broadcasting_services_act_1992, viewed 24 March 2005.

10.1.2 Scope and coverage of the online content scheme

The online content scheme provides the framework for the regulation of Internet content in Australia. Clause 3 of Schedule 5 defines Internet content as information that:

- (a) is kept on a data storage device; and
- (b) is accessed, or available for access, using an Internet carriage service;
- (c) but does not include:
- (d) ordinary electronic mail; or
- (e) information that is transmitted in the form of a broadcasting service.

A data storage device is any article or material (for example, a disk) from which information is capable of being reproduced. Accordingly, Internet content includes material on the World Wide Web (the Web), postings on newsgroups and bulletin boards and other files that can be downloaded from an archive or library.¹⁸⁷

Under Part 3 of Schedule 5, prohibited Internet content is material that is classified X18+ or RC by the Classification Board or, if it is Australian-hosted, classified R18+ and access to the content is not subject to a restricted access system. Restricted access systems are adult verification devices that allow only people who are 18 years or older to access adult material on the Internet.

Potentially prohibited content is material that has not been classified by the Classification Board, but if it was to be classified there is a substantial likelihood that it would be prohibited content.

This prohibition on X18+ and RC classified material is consistent with the prohibition applying to all broadcasting services under the BSA.

10.1.3 Industry codes of practice

Part 5 of Schedule 5 provides for the development and operation of Internet industry codes of practice that are registered by ACMA. The codes require ISPs and ICHs to take appropriate steps to protect the public from prohibited and potentially prohibited Internet content. Clause 60 sets out a range of matters that Internet industry codes must deal with, including to:

- restrict access accounts to persons over 18 years old;
- provide information about Internet content management and regulation;
- assist customers in dealing with spam that promotes or advertises offensive Internet content; and
- provide information about, and access to, filtering technologies.

While compliance with the Internet industry codes is not compulsory in the first instance, Schedule 5 provides that once ACMA directs an ISP or ICH to comply with

¹⁸⁷ See Broadcasting Services Amendment (Online Services) Bill 1999: Revised Explanatory Memorandum, 1999, p. 19.

a registered code, it must then do so or it will commit an offence. This enforcement procedure for industry compliance with codes of practice mirrors that applying to broadcasting industry sectors under the BSA.

If codes of practice are not developed by the Internet industry or if a registered code of practice is found to be deficient, ACMA may itself develop an industry standard.

The IIA is the industry body recognised by ACMA that is responsible for developing Internet industry codes of practice. Three codes have been developed by the IIA in consultation with the community and industry. Content code 3 of the IIA codes sets out the content filtering obligations of ISPs under the online content scheme.

Content filters play a dual role in the operation of the online content scheme. Firstly, when used in conjunction with restricted access systems and adult supervision, they are a key mechanism through which the scheme aims to protect children from exposure to material that may be unsuitable for them. To this end, ISPs are required to make available to subscribers one of the filter products that meet the requirements in the Schedule to the content codes on a cost price basis.

Secondly, filters underpin the designated notification scheme, which is also contained in the codes, for dealing with prohibited and potentially prohibited Internet content that is hosted outside Australia.

10.1.4 Complaints mechanism

Part 4 of Schedule 5 establishes a complaints mechanism, administered by ACMA, to investigate complaints about Internet content.

Users can complain to ACMA if they believe prohibited content is accessible. On receipt of a complaint, ACMA conducts an investigation and, if it finds content to be prohibited or potentially prohibited and hosted in Australia, must order the content to be 'taken down'. If such content is hosted overseas, ACMA must notify the content to the makers of filter products in accordance with the 'designated notification scheme' outlined in the codes.

In the case of 'sufficiently serious' content, such as child pornography, ACMA must refer material to the relevant police authorities and may also refer the material to counterpart Internet hotlines overseas.¹⁸⁸

Further information on Schedule 5 can be found in DCITA's 2004 report of the Schedule 5 review.

¹⁸⁸ ACMA's Online Complaints Hotline is accessible at: www.acma.gov.au/ACMAINTER.1900860:STANDARD:453308348:pc=PC_90102, viewed 6 July 2005.

10.1.5 IIA code provisions for mobile content services

As part of its code review process, the IIA incorporated provisions that apply exclusively to mobile CSPs that are members of the IIA and provide content services or content portals. Consistent with other content regulation, content that is, or would be likely to be, classified X18+ or refused classification is prohibited content and must not be provided. Pursuant to subclause 16.6 of the new codes, mobile CSPs may satisfy this by placing contractual arrangements on third party content providers that prohibit the provision of such content.

Clause 15 of content code 2 provides that before receiving access to content that would be likely to be classified R18+ or MA15+ by the Classification Board, end-users must opt-in to receive such content and the mobile CSP must take reasonable steps to ascertain that the end-user is at least 18 years old. Reasonable steps in this context include sighting or receiving electronic copies of a valid credit card or some other form of identification, such as a driver's licence, proof-of-age card, passport or birth certificate.¹⁸⁹

Consistent with other co-regulatory schemes under the BSA, mobile CSPs must establish procedures to receive complaints from end-users about inappropriately assessed content.¹⁹⁰ However, as a self-regulatory scheme, the IIA complaints process for mobile content services, envisages unresolved complaints being escalated through an 'independent process'.¹⁹¹ At the time of writing, this process had yet to be established, but is anticipated to be consistent with the complaints-review process established under the ACA's interim arrangements.

10.2 Community education

As mentioned above, the online content scheme relies not only on the co-regulatory framework contained in Schedule 5 to the BSA, but also, and importantly, on Australia's criminal laws and community education initiatives.

Consequently, clause 94 of Schedule 5 provides that ACMA should undertake community education. To this end, ACMA has developed and implemented a community education strategy the focus of which has been the Cybersmartkids website and a range of complementary information brochures providing general Internet safety tips and information about filter software.¹⁹²

As part of the online content scheme, the Australian Government also established NetAlert as an independent body to encourage and promote the safe use of the Internet, particularly child safety online.

NetAlert has been allocated \$6.5 million of Government funding over seven years to the 2005–06 financial year. In 2004, it was allocated an additional \$2 million to conduct a two-year community roadshow.

¹⁸⁹ IIA Code, subclause 15.3.

¹⁹⁰ Ibid., Schedule 2.

¹⁹¹ Ibid., Schedule 2, clause 5.

¹⁹² www.cybersmartkids.com.au, viewed 24 March 2005.

At the same time, the Government provided \$28.4 million over three and a half years to support the Australian Federal Police (AFP) in its efforts to address online child sex exploitation. In that context, NetAlert announced in February 2005 that it would be working closely with the newly formed Online Child Sex Exploitation Team in the AFP to develop a range of training programs for parents and teachers.

The ABA (now part of ACMA) and NetAlert were also active in promoting celebration in Australia of Safer Internet Day on 8 February 2005. To mark the occasion, the then ABA released its information brochure entitled 'How to be Phone Smart (and Stay Safe)'.¹⁹³

Virgin Mobile, in its submission to the review, noted the community education work of the two agencies, particularly referencing their work on content filters:

...NetAlert and the Australian Broadcasting Authority (ABA) have a track record of producing excellent reports on filters and associated technologies under the online content scheme.¹⁹⁴

10.3 Application of the online content scheme to new content services

Industry submissions to the review have consistently argued that the regulation of new and emerging convergent content services should be aligned with the co-regulatory frameworks established by the BSA.¹⁹⁵ They have also suggested that mobile CSP content portals should be treated as Internet content under Schedule 5.¹⁹⁶

In support of this position, Hutchison has provided the review with legal advice to the effect that its 'On3' portal content falls within the definition of Internet content contained in Schedule 5.¹⁹⁷ However, an alternative legal position can also be argued that would suggest that mobile CSP portal content that is only accessible to the subscribers to that service is not Internet content for the purposes of Schedule 5.

These alternative interpretations have arisen, in part because the 'Internet' is not defined anywhere in the BSA. As Hutchison's legal advice appears to suggest, this is an inevitable omission because, although the term is commonly used, it defies precise definition.

At law, therefore, the term will bear its ordinary English meaning. Different understandings as to that meaning, however, will lead to different conclusions: in the first case, a more expansive description of the Internet and in the second, a more limited one. The review is not in a position to take a legal view on this matter which could probably only be decided in a court of law.

Rather, the review can provide an examination of the policy objectives that underpin relevant regulatory frameworks and come to a view as to their appropriateness or otherwise to new and emerging services. Likewise, the review can examine the

¹⁹³ Australian Broadcasting Authority, *How to be Phone Smart (and Stay Safe)*, ABA, 2004. Available at www.aba.gov.au/internet/education/index.htm, viewed 24 March 2005.

¹⁹⁴ Virgin Mobile Australia, submission to the review, p. 8.

¹⁹⁵ *Ibid.*, p. 1.

¹⁹⁶ Optus, submission to the review, p. 2; and Vodafone, submission to the review, p. 8.

¹⁹⁷ Hutchison Telecommunications, submission to the review, pp. 11–12.

particular measures that are variously used to achieve those policy objectives and come to a view as to their optimal effectiveness given technology and market developments.

The examination of frameworks for the regulation of broadcasting and online content contained in earlier sections of the review report demonstrates a number of consistent policy objectives, including that:

- service providers should respect community standards in the provision of content and place a high priority on the protection of children from exposure to content that may be harmful to them;
- adults should be assisted in making informed choices about the content to which they and their children are exposed;
- there should be consistency between the regulation of conventional and new media;
- where service providers are in a position to exercise greater control over the content that consumers access, the obligations imposed on them to do so should be stronger;
- wherever practicable, means for addressing complaints about inappropriate content should be established;
- education is a necessary corollary to regulatory measures to establish safe practices; and
- public interest considerations about inappropriate content should be addressed in a way that:
 - does not impose unnecessary financial and administrative burdens on industry;
 - encourages the development of communications technologies and their take-up in Australia; and
 - readily accommodates technological change.

As noted above, the online content scheme is premised on the fact that ISPs are not in a position to control the content accessed by consumers until it is brought to their attention.¹⁹⁸ With respect to content hosted overseas, ISP control, even on a complaints basis, is limited to referrals to content filter manufacturers.¹⁹⁹ The online content scheme also assumes that ISPs and ICHs have the same lack of control over content. That assumption was made at the time the scheme was introduced. The review notes that the business model for ICHs may be similar to the mobile CSP portal model and that the assumption may need to be revisited in the light of the review.

The obligations imposed on the Internet industry under the online content scheme reflect this limited control. They are, therefore, less rigorous than the obligations imposed, for instance, on the commercial free-to-air broadcasters or the subscription

¹⁹⁸ Broadcasting Services Amendment (Online Services) Bill 1999: Revised Explanatory Memorandum, 1999, pp.4–5.

¹⁹⁹ *Ibid.*, p. 9.

television sector. The explanatory memorandum to the Bill that established Schedule 5 recognised that:

...no system of national regulation, short of isolating the nation from all transborder electronic communications, can expect to control all information transmitted online... Nor can online service providers be made to 'police' the content transmitted through their service (as for example a cinema or newsagent is made to in relation to conventional media), because the online service provider will often not be aware of, or be in a position to be aware of, much of the content which is being accessed or provided by users of their service.²⁰⁰

The review finds that where mobile CSPs provide a carriage service to consumers that enables them to access the open Internet, they have no more control over the content accessed than does a traditional ISP. Whether the service is accessed over a fixed or mobile device is not significantly different.

Mobile handsets are regularly used as modems to which laptops can be connected for the purpose of Internet access. The fact that new generation handsets are directly capable of Internet browsing does not support different regulatory treatment. **The review finds, therefore, that where mobile CSPs offer access to the open Internet they are providing an Internet carriage service and are regulated by the online content scheme.** The implications of this finding for mobile CSPs currently providing such access in relation to their content filtering obligations are discussed at section 19.2 below.

It was demonstrated in section 7.1 above, however, that in addition to Internet access, mobile CSPs generally offer content services over which they have either direct control (branded content on the CSP's portal), or contractual control, such as third party content made available on a revenue share basis.

Where the network operator exercises control over the content accessed by consumers, the obligations imposed by the online content scheme do not reflect commercial realities underpinning service delivery and can be strengthened. This finding would also apply in the event that service providers in the fixed environment were to offer content services on a comparable basis.

²⁰⁰ Ibid., pp. 4–5.

11 TELECOMMUNICATIONS REGULATION

11.1 Premium rate services

Premium rate services are voice, text and audiovisual services that provide information and entertainment content at a rate higher than the cost of a normal phone call. The business model for premium rate services is discussed at section 7.1.1 above.

In Australia, there are currently two forms of premium rate services:

- voice or facsimile calls to the 190x number range; and
- SMS and MMS calls to the 19x number range.

The communications platform that underpins the 190x number range is operated only by Telstra. Developed to provide audio services including telephone sex services, it has more recently been used to provide access to audiovisual content to mobile handsets, predominantly personalisation content.

11.1.1 Telephone Information Services Standards Council

General premium rate services that are provided on the 190x number range are subject to an industry self-regulatory scheme that is administered by the Telephone Information Services Standards Council (TISSC)—an independent body funded by industry players—and its code of practice. The TISSC code does not apply to premium rate SMS and MMS services provided on the 19x number range.

The TISSC code aims to promote consumer protection by:

- providing consumers with sufficient information to make informed choices about using premium rate services;
- establishing minimum standards for the supply of premium rate services;
- ensuring that premium rate services directed at children are delivered, promoted and advertised responsibly;
- ensuring that the content of premium rate services reflects the contemporary attitudes of Australian society; and
- ensuring that minors are not exposed to unsuitable material that may be contained in premium rate services.²⁰¹

In terms of the content of premium rate services generally, it provides that such services must not include content that:

- (a) is likely to be, having regard to the contemporary attitudes of Australian society, offensive to reasonable adults;
- (b) is likely to be, having regard to the contemporary attitudes of Australian society, unsuitable for minors. (This paragraph does not apply to telephone sex services, closed user access services or therapeutic or counselling services);
- (c) promotes, incites or instructs in matters of crime;

²⁰¹ TISSC code of practice, October 2002 version, clause A.2.

- (d) describes, incites or promotes unlawful sexual activity;
- (e) promotes or incites violence against any person or group, or incites racial hatred;
- (f) causes unnecessary alarm, distress or panic;
- (g) breaches, incites or encourages breaches of a law of the Commonwealth, or a law of the States or Territories of Australia; or
- (h) breaches a code of practice that applies to the premium rate service.²⁰²

Complaints about premium rate services are sent directly to TISSC, not to the customer's network operator or to the providers of 190x services. Once a complaint is received, a TISSC appointed arbitrator assesses the complaint and can apply commercial remedies to service providers that are found to have breached the code.²⁰³ The code also provides for an appeals process for complainants or service providers.

In financial year 2003–04, TISSC received complaints about 749 premium rate services, of which 526 were found to be in breach of the TISSC code.²⁰⁴

While this is a fully self-regulatory industry scheme, it is open to TISSC to refer complaints to government agencies as appropriate. ACMA retains the authority to make a service provider rule in relation to premium rate services under the Telecommunications Act.²⁰⁵

11.2 Telephone sex services

Telephone sex services are a category of premium rate service that is regulated in Australia under Part 9A of the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (TCPSSA). Part 9A was introduced in response to community concerns about the ease with which such services could potentially be accessed by minors.²⁰⁶

²⁰² Ibid., clause B.1.1. The Code is available at www.190complaints.com.au/code.htm, viewed 11 March 2005. See also ABA/ACA, joint submission to the review, p. 15.

²⁰³ See section F of the TISSC Code of Practice.

²⁰⁴ Figures are taken from TISSC quarterly complaints summaries at www.190complaints.com.au/summary.htm, viewed 11 March 2005.

²⁰⁵ See s. 99 of the Telecommunications Act 1997, regulation 3.1.2 of the *Telecommunications Regulations 2001* and the *Premium Services Determination 2004 (No. 1)* made by the Minister under paragraph 3.12(1)(c) of the *Telecommunications Regulations*.

²⁰⁶ Supplementary Explanatory Memorandum to the Telecommunications (Consumer Protection and Service Standards) Bill 1998, p. 51.

11.2.1 Definition of a telephone sex service

Under Part 9A of the TCPSSA, a telephone sex service:

is a commercial service supplied using a standard telephone service, where:

- (a) the supply is by way of a voice call made using the standard telephone service; and
- (b) having regard to:
 - (i) the way in which the service is advertised or promoted; and
 - (ii) the content of the service;

it would be concluded that a majority of persons who call the service are likely to do so with the sole or principal object of deriving sexual gratification from the call.²⁰⁷

While this definition of telephone sex services applies to calls made from both fixed and mobile handsets, calls with a graphic or visual element, including SMS or MMS and regardless of the strength of the content, are not telephone sex services as they are not voice calls.

The method for determining whether a service is or is not a telephone sex service was developed because of the interactive, and often 'live', nature of the service. As discussed in section 8.1.3 above in relation to the national classification scheme, such services are not amenable to the strict application of classification categories prior to service delivery. In the case of telephone sex services, the Australian Government developed a service definition based 'genre' identification.

In making a judgement on the motivation of callers to a service which is suspected of being a telephone sex service, the definition requires that regard be had to both the content of the service and the manner in which it is advertised or promoted. Where the advertising of a service differed in nature from the content, consideration would be given to both content and advertising and also to an overall judgement made about the nature of the service. The manner in which a service is advertised or promoted will, of itself, not be determinative of the need to consider the content of the service. Ultimately, it would be a question of which factor was most influential in the circumstances.

The genre-based test for telephone sex services is less amenable to objectively based decisions than assessment by reference to the classification categories of the national classification scheme.

11.2.2 Regulation of telephone sex services

Part 9A regulates the activities of both CSPs and telephone sex service providers and both may be held liable for breaches of the legislation.

Although the stated purpose of Part 9A is to prevent access by minors to telephone sex services, the legislation does not contain any references to minors or to the age of users of telephone sex services. Instead, telephone sex services are regulated by

²⁰⁷ TCPSSA, s.158J.

reference to a concept of 'unacceptable conduct' on the part of either a CSP or a telephone sex service provider. The legislation sets out two stages for defining unacceptable conduct.

The first stage consists of criteria which a telephone sex service must meet before the tests of unacceptable conduct can be applied. The key criteria are that the telephone sex service is supplied to a consumer in Australia who is a customer of a CSP and a charge for the telephone sex service is expected to be included in a bill sent by the CSP to the customer.

Where a telephone sex service is paid for by means of a credit card, or by any means other than in a bill sent by a CSP, neither the CSP nor the telephone sex service provider can be said to be engaging in unacceptable conduct.

The second stage for defining unacceptable conduct sets out the measures which must be taken by telephone sex service providers and CSPs. In summary, these are as follows:

- the customer to whom the bill will be sent by the CSP must have agreed in writing to the supply of the telephone sex service;
- the customer has been issued with a PIN or some other means of limiting access by other people to the telephone sex service;
- the customer is using the PIN or other means of limiting access when calling the telephone sex service; and
- the call is made to a number with an approved prefix.

The requirement for a PIN to access telephone sex services reflects the concern that a fixed standard telephone service is accessible by all household members in much the same way as a traditional television.

The approved prefix for telephone sex services is 1901 although it is open to either the Minister for Communications, Information Technology and the Arts or ACMA to nominate another prefix in addition to or instead of 1901. As mentioned previously, the 1901 prefix is operated by Telstra as part of its 190x premium rate service platform and allows the telephone sex service provider to charge consumers for the content of the telephone sex services through the Telstra 190x billing system. The 1901 prefix cannot, however, be directly equated with telephone sex services as it can be used for other services, while telephone sex services can legitimately be provided on other number ranges, provided the consumer is not being charged for the service through their telephone bill.

Where these measures are observed, neither the CSP nor the telephone sex service provider can be said to be engaging in unacceptable conduct.

ACMA's role as regulator of Part 9A derives from the statement of its telecommunications functions in the *Australian Communications and Media Authority Act 2005*. Prior to the establishment of the merged regulator, the ACA would refer suspect services for investigation to the ABA. Prior to 1 July 2005, Part 9A provided for the ABA to issue an evidentiary certificate which would constitute prima facie

evidence that a service was a telephone sex service. Where the ABA concluded that a service was likely to be a telephone sex service, the ACA could take enforcement action if the CSP or telephone sex service provider was engaged in unacceptable conduct or otherwise breached the legislation. This referral process recognised the ABA's role and expertise in the regulation of content in Australia. The ABA/ACA joint submission to the review provides further information about the operation of Part 9A of the TCPSSA.²⁰⁸

While industry submissions to the review supported the view that live or interactive content should be pre-assessed 'to minimise complaints about access to unsuitable material',²⁰⁹ neither telephone sex services regulation nor the TISSC self regulatory scheme were raised as significant issues. This is possibly because they are viewed as separate from general content regulation because of their basis in telecommunications legislation.

Historically, telephone sex services and premium rate services have been regulated under telecommunications legislation because they have been services delivered specifically to telephone handsets. The review has found, however, that market and technology developments will lead to the availability of significantly similar audiovisual content services across a range of platforms and devices, including fixed and mobile phone handsets. In this context, **the review finds there to be little justification for retaining a discrete regulatory framework for premium rate services under telecommunications legislation.**

²⁰⁸ See ABA and ACA, joint submission to the review, p. 15.

²⁰⁹ Hutchison Telecoms, submission to the review, p. 16.

12 CRIMINAL LAW

While the telecommunications provisions of the Australian criminal law are an important element of the online content scheme, as noted in section 10 above, their scope is broader than the Internet. They apply irrespective of the communications medium and equally to commercial and personal transmission and distribution. They were formerly contained in the *Crimes Act 1914*, but since the commencement of the *Crimes Legislation Amendment (Telecommunications Offences and Other Measures) Act (No.2) 2004* (Crimes Amendment Act) on 1 March 2005, they are located within the Criminal Code, which is Schedule 1 to the *Criminal Code Act 1995*.

This section of the report provides an overview of their operation and of the changes made by the Crimes Amendment Act.

12.1 Use of a carriage service

Section 474.17 of the Criminal Code, which replaced s.85ZE of the *Crimes Act 1914*, makes it an offence to use a carriage service in a manner which a reasonable person would regard as menacing, harassing or offensive. The Criminal Code provides that the matters to be taken into account in deciding whether a use of a carriage service, in all the circumstances, would be regarded as offensive include:

- (a) the standards of morality, decency and propriety generally accepted by reasonable adults; and
- (b) the literary, artistic or educational merit (if any) of the material; and
- (c) the general character of the material (including whether it is of a medical, legal or scientific character).²¹⁰

These are also the first three matters to be considered by the Classification Board in classifying films and computer games.

Prior to the commencement of the Crimes Amendment Act, the offence in relation to offensive use of a carriage service did not apply to Internet content within the meaning of Schedule 5 to the BSA.²¹¹ This was addressed by the Crimes Amendment Act to the effect that Internet content is now subject to the provision.

Further, previously the menacing or harassing use of a carriage service in former paragraph 85ZE(1)(a) required that the recipient be in fact menaced or harassed. The offence now requires that the use of the carriage service is menacing, harassing or offensive.

Finally, the maximum period of imprisonment for contravention of the offence was increased from one to three years by the passage of the Crimes Amendment Act.²¹²

²¹⁰ Criminal Code s.473.4.

²¹¹ Former subsections 85ZE(2) and (4) of the *Crimes Act 1914*.

²¹² Further commentary on the changes to this offence can be found in Crimes Legislation Amendment (Telecommunications Offences and Other Measures) Bill (No.2) 2004 Explanatory Memorandum, pp. 33–34.

12.2 New telecommunications offences—child protection

Recognising the potential for telecommunications networks to provide means for the exploitation of children, the Crimes Amendment Act also introduced new offences to address the sexual abuse of children. The new offences:

...prohibiting child pornography and child abuse material focus on the use offenders make of the anonymity of new technological tools, such as the Internet, to further their exploitative ends. ... [The] new offences will also target online ‘grooming’ activities by sexual predators. Unfortunately, adults are increasingly exploiting the anonymity of the Internet to forge relationships with children as a first step in luring them for sexual abuse. The Bill provides a responsible criminal law response to these abhorrent practices.²¹³

There are now specific offences for the access, transmission and making available of child pornography and child abuse material (sections 474.19 and 474.22), as well as the possession or production of such material with intent to transmit it or make it available via a carriage service (eg place it on the Internet - see sections 474.20 and 474.23). For a person or body to be guilty of these offences, they would need to have intended to use a carriage service to access, transmit or make available child pornography and child abuse material, and would need to know that, or be reckless as to whether the material was in fact child pornography or child abuse material.

The definition of child pornography includes material that depicts or describes persons under 18 engaged in a sexual pose or sexual activity, or in the presence of a person who is engaged in a sexual pose or sexual activity. It also covers material the dominant characteristic of which is the depiction, for a sexual purpose, of the sexual organs, the anal region or the breasts (in the case of a female) of a person who is under 18. Child abuse material includes depictions of cruelty, torture or physical abuse that would be considered offensive.²¹⁴

The new offences recognise that adult offenders can exploit the Internet and other telecommunications networks to win the trust of a child as a first step towards the sexual abuse of that child. This practice is known as paedophile ‘grooming’ and is now a criminal offence. An offence is committed if an adult exposes a child to material in order to make it easier to procure sexual acts (grooming, s.474.27), or if they do so in order to procure sexual acts (procuring, s.474.26).

ISPs and ICHs attract responsibilities under s.474.25 of the Criminal Code for reporting child pornography or child abuse material to the AFP if they have reasonable grounds to believe their service is being used to access such content. CSPs operating cellular networks that provide access to the open Internet would also attract these responsibilities. Reasonable grounds, in this case, might arise where an ISP or ICH receives a legitimate complaint from a subscriber. There is otherwise no requirement under the Criminal Code for ISPs and ICHs to monitor the use of their network.²¹⁵

²¹³ Ibid., p. 1.

²¹⁴ Criminal Code, s.473.1.

²¹⁵ Crimes Legislation Amendment (Telecommunications Offences and Other Measures) Bill (No.2) 2004: Explanatory Memorandum, p. 44.

13 OTHER RELEVANT LEGISLATIVE MEASURES

13.1 Spam Act

According to a recent ITU-sponsored survey, *Insights into Mobile Spam, World's First Collaborative Empirical Study*, more than 80 per cent of global mobile users have received unsolicited messages to their mobile handset.²¹⁶ In Australia, technology-neutral legislation was enacted in 2003 to combat commercial spam.

The *Spam Act 2003* prohibits the sending of unsolicited commercial electronic messages and applies to any electronic communication, including email, SMS and IM, which originates in Australia or is sent to an Australian electronic address. While subsection 5(5) makes it clear that the Spam Act does not extend to voice calls using a standard telephone service, the definition of electronic message in subsection 5(1) clearly encompasses spam sent to convergent devices via SMS, MMS or IM services:

- (1) For the purposes of this Act, an electronic message is a message sent:
 - (a) using:
 - (i) an Internet carriage service; or
 - (ii) any other listed carriage service; and
 - (b) to an electronic address in connection with:
 - (i) an e-mail account; or
 - (ii) an instant messaging account; or
 - (iii) a telephone account; or
 - (iv) a similar account.

With some exceptions²¹⁷, any message that falls within the definition of a commercial electronic message in section 6 of the Spam Act must meet the following elements, so as not to breach the Act:

- consent must have been obtained prior to the message being sent—consent may be express or implied;
- the sender must include clear and accurate identification and contact details of who is responsible for sending the message; and
- the message must contain an unsubscribe facility.

13.2 Online gambling

The *Interactive Gambling Act 2001* (IGA) establishes a complaints-based regime aimed at preventing the increase of social harm attributed to interactive gambling. It is

²¹⁶ University of St Gallen, bmd wireless and ITU, *First empirical spam study indicates more than 80 per cent of mobile phone users receive spam*, media release, 9 February 2005, 130.82.101.99/mobilespam/PR_bmd_unisg_final.pdf, viewed 10 February 2005.

²¹⁷ See Sch 1 of the Spam Act.

intended to minimise the increase of problem gambling caused by the availability of interactive gambling services.

The IGA, which came into effect in August 2001, makes it an offence to provide interactive gambling services to customers physically located in Australia and also makes it an offence to advertise interactive gambling services in Australia. These offences apply to all interactive gambling service providers, whether based in Australia or offshore, and whether Australian or foreign owned. The prohibited services typically include online casino-style gaming services of chance or mixed chance and skill, such as roulette, poker, craps, online poker machines and blackjack. The offences do not apply to exempt wagering services or exempt lotteries services.

As part of the framework established by the IGA, ACMA administers a complaints scheme under which Australian residents or companies carrying on activities in Australia are able to complain to ACMA if they believe people in Australia can access prohibited Internet gambling content.

The definition of 'interactive gambling service' applies to a service that is provided to consumers in the course of carrying on a business and by means of the following:²¹⁸

- (i) an Internet carriage service;
- (ii) any other listed carriage service;
- (iii) a broadcasting service;
- (iv) any other content service;
- (v) a datacasting service.

An interactive gambling service provided over a convergent device by means of the above would be regulated under the IGA.

The report of the statutory review of the operation of the IGA that was conducted by DCITA and released in 2004 contains more information about the IGA.²¹⁹

13.3 Privacy legislation

All private sector businesses with an annual turnover of AUD\$3 million, and some other private sector organisations, are subject to the private sector provisions of the *Privacy Act 1988*. The primary obligations are the National Privacy Principles.²²⁰ They impose obligations on such organisations in relation to matters including the collection, use, accuracy and security of an individual's personal information.

Broadly, the National Privacy Principles forbid an organisation from using or disclosing personal information for any but the primary purpose for which the information was collected. If an organisation wishes to use or disclose that

²¹⁸ *Interactive Gambling Act 2001*, subsection 5(1). Certain services are excluded from this definition by subsection 5(3).

²¹⁹ Available at www.dcita.gov.au/broad/online_content_and_gambling_regulation/online_gambling/review_of_the_iga/review_of_the_operation_of_the_interactive_gambling_act_2001, viewed 20 April 2005.

²²⁰ The national privacy principles can be viewed at www.privacy.gov.au/publications/npps01.pdf, viewed 20 April 2005.

information for another purpose, then generally that purpose must be related to the primary purpose for which the information was collected. Further, the individual must reasonably expect the disclosure, or the individual's consent must be obtained to authorise the disclosure.

In addition to the National Privacy Principles, certain telecommunications industry members are subject to the privacy provisions of the Telecommunications Act. Part 6 of the Telecommunications Act provides for the development of industry codes and standards which can cover a range of consumer protection and privacy areas. The Federal Privacy Commissioner must be consulted on any privacy provisions in codes.

Under Part 13 of the Telecommunications Act, carriers, CSPs and telephone number database operators are generally prohibited from disclosing information about communications, carriage services and people. Exceptions to the prohibition include:

- disclosure of call data to law enforcement agencies where the agency has certified that the disclosure is reasonably necessary for the enforcement of criminal law, the enforcement of a law imposing financial penalties, or the protection of public revenue;
- performance of carrier or carriage service duties;
- to prevent or lessen a serious and imminent threat to life or health;
- in calls to emergency service numbers; and
- disclosure that occurs with the knowledge or consent of the person concerned.

Part 13 also makes it an offence for the secondary disclosure or use of the information if it is not used for the particular purpose for which it was obtained.

Carriers and CSPs are also required, under Part 14 of the Telecommunications Act, to give assistance to law enforcement agencies for the purposes of law enforcement, revenue protection and national security. Section 313 provides that:

(3) A carrier or carriage service provider must, in connection with:

(a) the operation by the carrier or provider of telecommunications networks or facilities; or

(b) the supply by the carrier or provider of carriage services;

give officers and authorities of the Commonwealth and of the States and Territories such help as is reasonably necessary for the following purposes:

(c) enforcing the criminal law and laws imposing pecuniary penalties;

(d) protecting the public revenue;

(e) safeguarding national security.

An industry code of practice in relation to the matters contained in Parts 13 and 14 of the Telecommunications Act has been made by the Australian Communications Industry Forum (ACIF) and registered by ACMA.²²¹

Further information about the telecommunications privacy requirements can be found at ACMA's privacy page or DCITA's website.²²²

14 CONSUMER AND COMPETITION REGULATION

Several regulatory structures govern consumer protection and regulation of competition in the telecommunications industry. The operation of TISSC in relation to premium rate services is described at section 11.1.1 above. Other relevant structures are briefly outlined below.

14.1.1 Competition regulation

As part of the introduction of competition into the telecommunications industry in 1997, the Government introduced telecommunications-specific competition regulation intended to:

- provide long-term benefits to consumers of telecommunications services; and
- promote the efficiency and effectiveness of the Australian telecommunications industry.

Under Part XIB of the *Trade Practices Act 1974* (TPA), the ACCC has responsibility to monitor and regulate anti-competitive conduct of carriers and CSPs. Further, the ACCC administers the telecommunications access regime in Part XIC of the TPA. This involves the ACCC having the power to 'declare' a service to which it believes all service providers should have access.

Once a service is declared, access providers of the service must comply with the standard access obligations detailed in s.152AR in the TPA. The ACCC has the power to arbitrate an access dispute if commercial negotiations cannot resolve that dispute. The ACCC can also accept voluntary undertakings from access providers, which will apply to all parties seeking access to the particular declared service.²²³

The Telecommunications Act contains a number of pro-competitive safeguards, administered by ACMA, which aim to promote the development of competition and address misuse of significant market power, including:

- preselection of service providers and call-by-call override of preselection;
- independent management and allocation of telephone numbers;

²²¹ 'Provision of Assistance to National Security, Enforcement and Government Agencies' ACIF C537:2001, available at internet.aca.gov.au/acainterwr/telcomm/industry_codes/codes/c537.pdf, viewed 20 April 2005.

²²² www.acma.gov.au/ACMAINTER.1900860:STANDARD:766287872;pc=PC_1686, viewed 6 July 2005, and www.dcita.gov.au/tel/emergency_call_services,_telecommunications_privacy,_law_enforcement_and_national_security/telecommunications_privacy, viewed 20 April 2005, respectively.

²²³ The ACCC has other responsibilities for telecommunications competition, which are discussed at www.accc.gov.au/content/index.phtml/itemId/269239, viewed 20 April 2005.

- number portability requirements; and
- competitively neutral technical regulation of interfaces and networks generally.²²⁴

14.1.2 The Telecommunications Industry Ombudsman Scheme

The Telecommunications Industry Ombudsman (TIO) is an independent body, established by Australian Government, but funded by industry, that resolves disputes between customers and CSPs and ISPs about carriage services. Under Part 6 of the TCPSSA, eligible CSPs and ISPs must enter into and comply with the TIO Scheme. Section 128 provides that:

(4) The scheme must provide for the Telecommunications Industry Ombudsman to:

- (a) investigate; and
- (b) make determinations relating to; and
- (c) give directions relating to;

complaints about carriage services by end-users of those services.

The TIO's constitution expands on its powers and responsibilities.²²⁵ Generally speaking, they relate to billing and consumer issues, but importantly cannot relate to the 'content of a content service'.²²⁶

The TIO can and does receive complaints and investigate matters relating to the billing for audiovisual content and the delivery of a service. By way of an example as to the main areas of the TIO's jurisdiction, the majority of complaints made to the TIO in the financial year 2003 to 2004 in relation to mobile services were for:²²⁷

- billing (22.2 per cent);
- contracts (26.6 per cent);
- faults (17.2 per cent);
- credit control (16.6 per cent); and
- customer service (12.6 per cent).

Internet service complaints were mostly regarding:

- billing (31.1 per cent);
- faults (21.9 per cent);
- customer service (18.3 per cent); and
- provision of service (12.9 per cent).

²²⁴ See www.amca.gov.au for more information.

²²⁵ As at 19 June 2003, www.tio.com.au/MEMBERS/LIBRARY/documents/Constitution.PDF, viewed 20 April 2005.

²²⁶ TCPSSA paragraph 128(6)(b).

²²⁷ Telecommunications Industry Ombudsman, *Annual Report 2004*, TIO, Melbourne, 2004, p. 5.

15 INTERNATIONAL REGULATORY APPROACHES

While content regulation across the world is well developed in relation to broadcasting, film and Internet content, there have been few moves internationally to specifically regulate content delivered to mobile devices. Network Strategies noted, in relation to this medium, that ‘regulators around the world are currently considering the degree of their involvement in the regulation of adult content’.²²⁸ The review notes that in some countries, such as Belgium and Denmark, industry has developed self regulatory codes. Further, in other countries, such as Switzerland, mobile content services are regulated by reference to more general content law. The review has considered self-regulatory developments in the United Kingdom and the United States and has provided the following information.

15.1 United States

The United States regulator, the Federal Communications Commission (FCC) recently wrote to the US Cellular Telecommunications & Internet Association (CTIA) recommending that it do more to discourage children from accessing adult content via mobile devices. Specifically, the FCC asked CTIA to:

- educate parents as to their options to protect their children, including blocking Internet access from their child’s handset;
- educate parents as to what industry is doing to protect children from access to inappropriate content;
- consider changing the CTIA carriers’ code of practice to promote industry self regulation in this area; and
- examine the efforts being made by governments and industry in other countries, including the United Kingdom and Australia.²²⁹

Mobile Communications International (MCI) has reported that CTIA is working on a package of guidelines for access to adult content provided by mobile CSPs. MCI quotes CTIA as stating that the guidelines would require binary classification of audiovisual content as either permissible to those under 18 or not. The guidelines are expected to be released in late 2005. The guidelines may also include age verification processes.²³⁰

15.2 United Kingdom

Premium rate services in the United Kingdom are regulated by the Independent Committee for the Supervision of Standards of Telephone Information Services (ICSTIS), an independent, but industry-funded, regulator. The ICSTIS Code of Practice is approved by the Office of Communications (OFCOM), the Government

²²⁸ Network Strategies, op cit., p. 127.

²²⁹ J Muleta, Chief, Wireless Telecommunications Bureau, FCC, Letter to S Largent, President CTIA – The Wireless Association, 14 February 2005. Available at hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-256795A1.pdf, viewed 8 March 2005.

²³⁰ ‘CTIA Calls for Age Verification Standard’, *Mobile Communications International*, Issue 119, March 2005, p. 56.

regulator, pursuant to s.121 of the *Communications Act 2003*.²³¹ The ICSTIS Code provides a complaints-based scheme and grants ICSTIS significant powers to enforce it.²³²

While appearing to focus more on consumer protection than content issues, the ICSTIS code does require that ‘services and promotional material must not contain material inciting violence, sadism or cruelty, or be of a repulsive or horrible nature, [and] involve the use of foul language’.²³³ Further, ‘services or promotional material must not, or must not be likely to ... cause grave or widespread offence’.²³⁴ Beyond this, there is no requirement for the labelling of services, other than requiring that services and promotions must not be likely to mislead consumers.²³⁵

All premium rate services must be registered by ICSTIS prior to being made available. Certain services must also apply for ‘prior permission’, which may result in special conditions being placed upon them. Pursuant to clause 5.1, live services, which are defined as ‘premium rate services which involve two-way or multi-way live conversation’,²³⁶ must seek prior permission before commencement. One of the conditions that ICSTIS is able to impose is a requirement for services to be monitored or recorded to enable complaints investigation.²³⁷

In January 2004, the UK mobile operators released a ‘*Code of practice for the self-regulation of new forms of content on mobiles*’.²³⁸ This code provided for an independent body to be formed to classify audiovisual mobile content. The classification is binary in nature – i.e. ‘18’ or unrestricted. All ‘18’ content must be placed behind access restrictions that make it unavailable to customers that have not satisfied the operator that they are 18 years or over. The framework for classification was announced by the Independent Mobile Content Board (IMCB), a subsidiary of ICSTIS, on 7 February 2005.²³⁹

In addition to the binary classification, the framework provides for classification according to criteria relating to themes, language, sex, nudity, violence, drugs, horror and imitable techniques, such as detailed descriptions of techniques that could be used in a criminal offence.²⁴⁰ The development of the framework took into account ‘the need to be consistent, as far as possible, with standards for other media’, such as film, software and games.²⁴¹ While the framework provides for certain content to be restricted to those 18 years or more, there is no restriction on the type of content that

²³¹ Available at www.icstis.org.uk/icstis2002/default.asp?node=5, viewed 20 April 2005.

²³² ICSTIS Code of Practice January 2004, part 7.

²³³ *Ibid.*, clause 4.2.1.

²³⁴ *Ibid.*, paragraph 4.2.2(e).

²³⁵ *Ibid.*, clause 4.3

²³⁶ *Ibid.*, clause 1.1.6.

²³⁷ *Ibid.*, clause 5.2.1

²³⁸ The operators are Orange, O2, T-Mobile, Virgin Mobile, Vodafone UK and 3.

²³⁹ The document is available at www.imcb.org.uk/classificationframe, viewed 20 April 2005.

²⁴⁰ Internet Mobile Classification Body, *IMCB Guide and Classification Framework for UK Mobile Operator Commercial Content Services* (first edition), IMCB, 2005, sections 2.1–2.7.

²⁴¹ *Ibid.*, section 1.1. Note, however, that if the content is delivered via a premium rate service, it will be subject to the ICSTIS code of practice.

can be provided within the '18' category. Content must not, however, be unlawful or illegal.²⁴²

Carriers are to assess their own content according to the framework and consumers can complain to their carrier if they believe content has been misclassified.

Complaints can then be escalated to the IMCB if no response is received within 28 days, or if the carrier does not agree with the appeal.²⁴³

15.3 Multilateral approaches

Two key international forums have considered the issue of inappropriate content, including that delivered to mobile devices.

- The OECD's Working Party on the Information Economy is undertaking work on the digital carriage of content. An expert panel was convened on 3 June 2004 to 'analyse and discuss changing digital broadband content value chains and business models and help identify new challenges and issues facing the development and delivery of digital content'.²⁴⁴ The working party has undertaken studies on four sectors of digital content, one of which is mobile content, and released a report on each of these in May 2005. While examining issues such as privacy, market competition and digital rights management, the report does not consider content regulation in the sense that the review does.²⁴⁵
- The World Summit on the Information Society, an initiative of the ITU, is examining the issue of unlawful content through the Working Group on Internet Governance. An issues paper on unlawful content and access protection was prepared for the Working Group's second meeting in February 2005.²⁴⁶

The Interactive Software Federation of Europe has developed the Pan European Game Information classification system for interactive games, including consoles and Nokia mobile devices (e.g. N-Gage). There are five classifications, 3+, 7+, 12+, 16+ and 18+, and pictograms for different content types (violence, bad language, fear, sex, drugs and discrimination) that act in a similar manner to consumer advice attached to films classified in Australia by the Classification Board.

The system, which is voluntary, involves game developers proposing a rating to the organisation which makes the rating, the Netherlands Institute for the Classification of Audiovisual Media (NICAM).²⁴⁷ NICAM will then assess the game and confirm the rating and any of the content-type logos to be attached to it.²⁴⁸ The developer is then granted a licence to display the relevant pictograms. A NICAM complaints board has been convened to hear complaints about ratings.

²⁴² Ibid., clause 1.4.

²⁴³ Ibid., section 3.

²⁴⁴ Working Party on the Information Economy, *Digital Broadband Content: Panel and Government Session, 3 June 2004*, OECD, Paris, 2005, DSTI/ICCP/IE(2004)15/FINAL, p. 3.

²⁴⁵ The report can be found at www.oecd.org/dataoecd/19/7/34884388.pdf, viewed 10 May 2005. The OECD's work plan on digital broadband content delivery can be viewed at www.oecd.org/document/62/0,2340,en_2649_33757_32160190_1_1_1_1,00.html, viewed 24 March 2005.

²⁴⁶ The issues paper is available at www.wgig.org/working-papers.html.

²⁴⁷ The Video Standards Council (VSC) will act as an agent for NICAM in the UK.

²⁴⁸ Note, the game will only be viewed if the proposed rating is 12+ and above.

The Internet Content Rating Association (ICRA) is a non-profit, international organisation aimed at making the Internet a safe place for children. It has developed a questionnaire for content producers through which content can be assessed. Producers assess their website according to the questionnaire, and based on the responses, a short piece of code is developed which is then attached to the website. Certain filter software detects and assesses the code when a user attempts to access an ICRA-rated site to decide whether that website should be able to be accessed.

The questionnaire considers the following topics when assessing a website:

- the nudity and sexual content of a site;
- the violence depicted on the site;
- the language used on the site;
- chat facilities; and
- other topics such as gambling, drugs and alcohol.

Further information about international systems for content classification, including classification of films, can be found at Annex C to the Network Strategies Report.

ISSUES

During the review a number of issues have emerged which have the potential either to impact on existing policy and regulatory frameworks or to raise new policy concerns for government. The review has indicated that technology developments and changing market structures will facilitate widespread access to lightweight, mobile devices that are capable of delivering content from multiple communications platforms. Content that is currently available over the Internet, premium rate services and mobile proprietary portals will be readily accessible to consumers using a single device. This context suggests both the need and the opportunity to provide enhanced community safeguards in relation to access by minors to inappropriate content and online safety.

The availability of these devices will not, however, guarantee their commercial success. While it is likely that convergent devices will become an increasingly popular means of accessing content, a number of factors could hinder their take-up and delay the individual and economic benefits of greater connectivity. These include the development of other and more attractive technologies, the cost of convergent devices and access to content services, the sometimes restricted availability of devices, lack of technological awareness or, for many individual users, the absence of a compelling reason to change.

Another factor that could delay the introduction of new and innovative content services would be administratively or commercially burdensome regulation. The challenge for government is to provide a regulatory framework that is sensible both for how content is accessed today and how it is likely to be accessed in the future. The Australian Government has explicitly recognised this challenge both in the regulatory policy underpinning communications legislation and in the Terms of Reference for this review.²⁴⁹

The review has also been mindful of recent changes to criminal law that directly underpin Government policies on safety in the modern communications environment. In view of the changes that were outlined in section 12.2, the review would suggest that communications regulation is not the most appropriate vehicle for addressing certain matters.

The following sections provide more information on the issues that have emerged:

- regulatory certainty;
- a framework for regulating convergent content;
- inappropriate contact; and
- mobile access to the Internet.

²⁴⁹ See *Broadcasting Services Act 1992*, subsections 4(2) and (3), and *Telecommunications Act 1997*, s.4, and Attachment A to this report.

16 REGULATORY CERTAINTY

As outlined in earlier sections of the report, in Australia there are currently a number of regulatory frameworks that apply to content according to the communications platform over which it is delivered. In part this is because premium services, which until recently were primarily voice services, are regulated as part of the legislative framework governing telecommunications, while Internet content is regulated under broadcasting legislation. The absence of a merged regulator has also contributed to the use of different regulatory approaches.

Previously, broad assumptions could be made about the types of content which were available on different communications platforms and the context in which content was accessed. For example, televisions were bulky, fixed devices with a relatively limited choice of content at any one time. They were usually located in a prominent place in the home, enabling easy parental supervision. The Internet, which offered greater variety of content, was also generally accessed through bulky, fixed devices. Until now, mobile phones which may be less amenable to parental supervision, were unable to provide access to audiovisual material. Fixed line telephones were only capable of receiving audio material.

As the review report has outlined, these assumptions are increasingly invalid.

A further explanation for the practice of regulating content differently is that service providers are able to exercise different levels of control over the content to which their networks provide access. This has direct implications for the effective level of control which can be exercised by regulators.

For example, at present analogue free-to-air television broadcasters transmit just one program at any given time, giving broadcasters a very high degree of control over what is being transmitted. At the opposite end of the spectrum, Internet users can obtain access to content from anywhere in the world and ISPs have no control over the content accessed through their servers. While telephone carriers have no control over the content of private peer to peer communications, they are in a position to exercise some degree of control over content accessed through premium rate services supplied by the carrier.

Generally speaking, there is a direct relationship between the degree of control which a service provider can exercise over the supply of content and the share of revenue which it obtains from that supply. Where service providers are in a position to exercise control, more is expected and required of them by both regulators and consumers.

The purpose of the review is to examine the regulation of content delivered over convergent communications devices. While the review has reported on technology developments that will enable access to broadcasting content over such devices, that content is already subject to comprehensive regulation and appropriate community safeguards that would be carried over to new market structures provided the requirements of a broadcasting service under the BSA were met. The requirements placed on broadcasters under the BSA are understood by industry and consumers

alike. Submissions to the review have not suggested that convergent devices will in any way impact upon or undermine existing broadcasting regulation.

However, the different regulation of non-broadcasting communications content under Schedule 5 to the BSA (Internet) and the Telecommunications Act (premium rate services) has been consistently raised in industry submissions to the review. The principal differences arise in relation to:

- whether content is pre-assessed as to suitability for minors and, if so, how;
- access restrictions or prohibitions that apply to similar content from different communications platforms;
- complaints processes; and
- regulatory jurisdiction and enforcement.

These differences are explained in the following sections.

16.1 Content assessment

As outlined in section 8.1 of the report, decisions made under the Classification Act are enforced under State and Territory legislation which together comprise the national classification scheme. The OFLC, in its submission to the review, suggested that enforcement of communications content regulation would most likely fall to Commonwealth legislation. As earlier sections of the report have demonstrated, this has been the case with respect both to Internet content and premium content services.

Unlike computer games, films on theatrical release and films for sale or hire, content supplied on communications platforms is not required to be pre-classified by the OFLC. In the case of Internet content, such a requirement would be both impracticable and onerous. Consumers can access enormous amounts of content worldwide that is constantly changing. Rather, classification is required only on complaint, for the purposes of enforcement.

In its proposed interim arrangements with respect to premium rate MMS and SMS and portal content, the then ACA proposed industry pre-assessment of content in accordance with the categories of the Classification Guidelines. By reference to classification categories, providers of these content services are to assess whether particular content is appropriate for unrestricted access (ratings up to and including M), restricted (MA15+ and R18+ ratings) or prohibited access (X18+ rating or refused classification). The interim arrangements envisage referral to the OFLC for classification only where there are concerns that particular content had been incorrectly assessed by industry players.

This approach is consistent with the communications policy principle of encouraging industry self-regulation where practicable. It is also consistent with the regulatory policy of communications legislation, that is, to avoid burdensome regulation where possible.

In its submission to the review, the OFLC recognised that the immediacy of delivery of stored content to consumers would have an impact on the feasibility of classification where content is to be delivered on a commercial basis.

The OFLC also acknowledged the distinction between live or ephemeral services delivered on a commercial basis and those delivered non-commercially. It recognised that live material delivered on a non-commercial basis is not capable of classification. Although, if a record is retained, such content may be ‘classifiable’ for the purposes of law enforcement, this would not require classification at the point of delivery.

By definition, live or ephemeral content, which includes telephone sex services, interactive chat and live streamed audiovisual material, is not pre-recorded or stored prior to delivery and so cannot be pre-assessed in the same manner as stored content. A different regulatory test is required for the providers of such content services.

Rather than refer to the Classification Guidelines of the national classification scheme, under the regulation of telephone sex services, providers of ephemeral premium content are required to determine whether their services are of an adult genre. The adult genre test is a binary test without the nuanced assessments and gradations of the national classification scheme. It does not, for example, allow for the distinctions which the Classification Guidelines make between content rated R18+, X18+ or refused classification, thereby reducing the level of information which is available to users about the service.

16.2 Restricted and prohibited content

The following table, figure 15.1, illustrates the different levels at which access to similar content might be restricted depending on the communications platform over which it is delivered.

Figure 15.1: Access restrictions across communications platforms

	Refused Classification	X18+ rated	R18+ rated	MA15+ rated	Adult Genre
Internet content (Australian hosted)	Prohibited	Prohibited	Restricted	Unrestricted	NA
Internet content (Overseas hosted)	Prohibited	Prohibited	Unrestricted	Unrestricted	NA
Premium mobile services	Prohibited	Prohibited	Restricted	Restricted	Restricted
Telephone sex services	NA	NA	NA	NA	Restricted
Person-to-person	Unrestricted ²⁵⁰	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Television	Prohibited	Prohibited	Restricted	Restricted	NA

²⁵⁰ Certain content may breach provisions of the Criminal Code regardless of whether or not it is regulated under communications legislation.

As acknowledged in the Classification Guidelines issued by the OFLC, the impact of content may be lessened where it is provided by verbal rather than audiovisual means. Telephone sex services provide users with highly explicit verbal depictions of sexual activity. Such depictions might, if they were provided using audiovisual content on another medium, attract an X18+ rating. The absence of audiovisual material reduces the impact of the content so that it is more appropriately restricted than prohibited. Similarly, textual depictions of activity are likely to have a lesser impact than audiovisual depictions, so that adult premium text services are also more appropriately restricted than prohibited.

Users come to various communications platforms and devices with different expectations, which both drive and arise from how the platforms are regulated. Families sometimes allow children to watch free-to-air television for extended periods during particular time zones because of their confidence in the content requirements placed on broadcasters under the BSA. By comparison, consumers are encouraged to treat the Internet more warily, particularly in terms of allowing children to view Internet content in unsupervised situations.

Because of the rapid advances in mobile phone technologies and capabilities, mobile phones are likely to represent the communications platform where, for a time, the expectations of many users will potentially diverge furthest from reality. In particular, some parents may initially be surprised at the type of content which can now be accessed from relatively inexpensive phones used by children. This divergence between expectations and reality is likely to increase as 3G phones become more accessible.

Not only are there differences between the levels at which content is restricted on different platforms, the restrictions also operate differently depending on whether they are focussed on restricting supply of content or access to it. Under the interim arrangements for premium mobile services, both supply and access restrictions apply. Content that would be rated X18+ or refused classification may not be provided to users, while access restrictions apply to content rated R18+ or MA15+.

Access restrictions also apply to adult genre services, including text-based adult chat services and telephone sex services. Restricted adult services may be provided only on specific number ranges. This mechanism is feasible because carriage service providers are able to exercise a reasonable level of control over the content carried on their networks and because the functionality of the telecommunications system allows particular number ranges to be selectively blocked or unblocked for individual users.

By contrast, the regulation of Internet content reflects the lack of control exercised by ISPs over the content accessed by their subscribers. Where Internet content is hosted in Australia, content rated R18+ is permitted where it is subject to a restricted access system. The regulator may direct Australian ISPs and ICHs to take-down content rated X18+ or refused classification or content rated R18+ which is not subject to a restricted access system. Given the global nature of the Internet, it would not be practicable for Australian regulators to seek to apply these measures to content hosted overseas. Instead, where the regulator becomes aware of overseas Internet content rated X18+ or refused classification, it notifies designated filter providers of this

content so that filters can be updated to block access to the content. ISPs are required to provide users with the option of using these filters at cost price.

While access restrictions for Internet content, telephone sex services and other premium services are all aimed at preventing minors from accessing inappropriate material, there is no uniformity in how adult users are allowed access to such material. The level of proof required in establishing the age and identity of adult users varies across platforms, as do the processes required to override access restrictions.

In recognition of the individual focus of mobile communications devices, the interim arrangements for premium mobile services allow users to gain ongoing access to adult services after a once-off opt-in age-verification process. By contrast, Internet content and telephone sex services may be accessed from fixed devices used on a household basis. As a result, access restrictions require a PIN or password to be used each time an adult service is accessed, as well as an initial age-verification process.

16.3 Complaints processes

It is always possible that content regulation may be imperfectly implemented by service providers in a co-regulatory framework. Effective complaints processes are, therefore, required to ensure that service providers are aware of community concerns and take responsibility for their decisions. Arrangements for escalated complaints are required for the purposes of review and enforcement of regulatory compliance.

There is a variety of complaints processes currently operating in Australia under communications legislation. In an increasingly convergent market for content services, however, the correct processes for particular complaints may not be readily apparent to consumers.

Depending on the communications delivery platform, the appropriate first contact for complaints about content or content related issues may be the carriage or content service provider, ACMA or TISSC. In addition, escalated complaints about billing issues, including billing for content, can be made to the TIO. The ACCC has responsibility for administering federal fair trading legislation, while State and Territory fair trading agencies administer the fair trading laws of their respective jurisdictions.

The different levels of control that service providers can exercise over the content carried over their networks is, again, a key factor in explaining differences in complaints processes. It is a sound principle that complaints should be made in the first instance to the party that is both readily identifiable to consumers and in the best position to take prompt action to address the complaint. Generally in communications related complaints processes, that principle has been able to be applied. However, in the case of Internet content complaints are made directly to ACMA because it would be inappropriate to require ISPs to take unilateral action to remove content.

Complaints about content delivered over communications devices can arise for many reasons. Users may regard content as highly offensive and illegal (such as child pornography or X18+ rated material) or as inappropriately provided without access restrictions.

Far more common, however, are complaints about content and content services arising where content is purchased or downloaded by a user. These would include: whether the content had been supplied in a timely manner or at all; whether the content had been supplied as advertised and ordered; where a consumer has unwittingly contracted to a subscription service and has difficulty in cancelling the unwanted subscription; where an information service is inaccurate or out of date; where there is a dispute about the charge for content; or where the use of content services have resulted in unexpected high bills. Currently, users of premium services may seek the assistance of TISSC if their complaints cannot be resolved by the service providers. The TIO may investigate complaints about the billing of content services, but is statutorily prohibited from investigating complaints about the content of a content service.

16.4 Regulatory jurisdiction and enforcement

At the same time that convergence between technologies and market structures risks leading to confusion amongst consumers about appropriate complaints processes, it will also potentially result in uncertainty amongst industry about the jurisdiction of individual regulatory agencies.

This potential arises where content typically associated with one platform is delivered through a different platform or is delivered in a manner not previously envisaged when regulatory measures were developed. The proprietary content portals operated by mobile carriers provide a clear example of such uncertainty. As discussed in section 10.3 above, it is a matter of legal argument whether content accessed via mobile CSP content portals constitutes Internet content under Schedule 5 to the BSA. To remove uncertainty pending this review, the then ACA was directed to put in place service provider rules under the Telecommunications Act.

While differences of approach between Schedule 5 and the ACA's service provider rules can be justified by reference to the greater control that CSPs exercise over the content on their portals, the differing regulatory jurisdictions involved serve to complicate further the environment within which industry operates at a time of rapid technological and market developments.

There are also differences in the enforcement of regulation under the two approaches. Under Schedule 5, it is not an offence for an ISP to provide access to prohibited content unless it has received a direction from the regulator in respect of that content. In the case of service provider rules made under the Telecommunications Act, it is unlawful for a CSP to provide prohibited content or to provide restricted content without the appropriate restrictions. The ACMA may give remedial directions and formal warning about breach of these rules. Compliance with a service provider rule is a civil penalty provision.²⁵¹

²⁵¹ s.101 Telecommunications Act

16.5 Impact of convergent communications devices

The existing regulatory environment for content delivered over communications devices in Australia was predicated on certain services being accessible only on particular devices. And until now, platform-specific differences between content services could reasonably be expected to be obvious to consumers. The review report demonstrates that these conditions can no longer be assumed. A consumer with a single convergent communications device could access a premium voice service, a telephone sex service, a premium mobile service (text or audiovisual content) and Internet content. There would be differences in the regulation of each of these services.

The review finds that technology and market developments will facilitate access to essentially the same content services through a variety of communications platforms and that platform-specific differences between content services cannot be expected to be obvious to consumers.

New service offerings on convergent communications devices will cut across the technological and commercial distinctions that currently underpin different regulatory approaches. In these circumstances, there is the potential for regulatory uncertainty amongst industry, consumers and regulatory agencies themselves. There is also the potential for inconsistent treatment of essentially the same content depending on the communications platform used.

In this context, it would be appropriate to refocus the regulation of non-broadcasting communications content on the level of control exercised by service providers rather than the communications delivery platform. This would potentially lead to the development of a coherent, single framework in which the different obligations of service providers are clearly articulated.

For instance, the framework for Internet content regulation under Schedule 5 to the BSA assumes that ISPs have no control over the content accessed by consumers. The commercial arrangements underpinning some new service offerings suggest that network operators may have greater control of the content delivered over their networks. The review considers that this would suggest grounds for imposing additional obligations on the providers of those services than apply to ISPs that only provide access to the open Internet.

The communications industry is characterised by technology developments and changing market structures. In this context, **the review finds that regulation based on the level of control exercised by service providers rather than the communications delivery platform is likely to be more robust and adaptable in the face of new and innovative service offerings.** At the same time, it should be practicable to harmonise the regulation of communications content and to reduce the complexity encountered by users, industry and regulators.

17 A FRAMEWORK FOR REGULATING CONVERGENT CONTENT

The review has found that new convergent content services cut across existing regulatory approaches under the BSA and telecommunications legislation. These approaches have been implemented to address public interest considerations about access to inappropriate content, especially by minors, as they have arisen. They are underpinned by assumptions about how and where content will be accessed that can no longer be made with any certainty.

In the face of rapid technology and market developments, the challenge for government is to provide a coherent regulatory framework for all non-broadcasting content that is provided commercially over communications networks. This would include both stored and ephemeral content services that are offered commercially.

This section of the report considers how such a framework might be constructed.

17.1 Commercial stored content

While audiovisual services on convergent devices, such as new-generation mobile handsets, are new and potentially innovative because they are delivered to people on the move, much of the content is likely to be derivative of traditional media. For instance, ‘mobisodes’ drawn from television series, ‘teasers’ for cinema release movies and video-on-demand or information updates from news and sporting events. In this context, it would be preferable to align regulation of these services with the general approach to content regulation under the BSA and to provide that consumers receive broadly equivalent levels of consumer information expressed in consistent terms with traditional media.

As discussed in section 9, the approach to content regulation under the BSA is co-regulatory, with industry codes of practice underpinned by legislation. While certain obligations, such as those in relation to prohibited content, are imposed by law, industry retains important flexibility over implementation through codes of practice.

The review has found that it would be inappropriate to apply the approach to Internet content under the online content scheme to CSP portal content. Whereas traditional ISPs are unable to address inappropriate content without notification that the content exists, CSPs are able to control the content accessed on their portals either directly because it is offered as branded content, or indirectly through contractual arrangements. **The review finds that CSPs should be required to exercise this ability to provide consumer information and restricted access to content that would not be suitable for children.**

As noted in section 7 above, the portal model for content delivery could also operate in relation to fixed devices such as PCs. Some commentators have suggested that the transition to a fully broadband environment will lead to industry rationalisation and to a situation in which a far smaller number of ISPs seek competitive advantage by offering their subscribers value-added services using the portal model.

Where Australian ISPs are in a position to exercise greater levels of control than they can over the open Internet (through portal content or other delivery models) those content services should be regulated under the proposed new framework for convergent content.

The review notes that the major Australian mobile CSPs are all members of the IIA and that, pending the outcome of the review and establishment of interim arrangements by the then ACA, they sought to establish consumer protections for portal content as self-regulatory measures formalised in the codes review process. A regulatory framework of the sort proposed by the review would establish a separate and clear authority for ACMA to register and enforce industry codes of practice in respect of commercial convergent content services.

17.1.1 Consumer information and restricted access

Content regulation in Australia aims to provide consumers with sufficient information to make informed choices about the content that they and their families access.

The review has found that new and emerging convergent content services are not amenable to the strict application of the national classification scheme which requires the classification of all content. This is because of the dynamic nature of the content, the number of content items likely to be involved, their time specific value and their rapid refreshment rate. Industry submissions to the review also point to the commercial burden that would be involved in the classification of all content, both in terms of the costs charged for the Classification Board decision and the delay involved in getting services to market.²⁵²

As a result, the review has found that an adapted model, which is nonetheless aligned with the national classification scheme, would be optimal in the mobile convergent environment. In its submission to the review, the OFLC acknowledged that a variety of regulatory approaches based on the categories of the national classification scheme were feasible with respect to stored convergent content.²⁵³

In the case of stored content that is offered commercially, the review finds that it would be appropriate to require that material likely to meet the classifiable elements associated with MA15+ and R18+ be so assessed and be subject to restricted access systems (that preclude access by minors aged 15 years and over) approved by ACMA. The review recognises that this is a more stringent requirement than applies, for instance, with respect to cinema release films classified MA15+ which are not legally restricted for minors aged 15 years or over.

At the current time, however, the only reliable and efficient mechanisms to verify the age of consumers do so by reference to whether or not they are 18 years of age. In the event that means are developed that provide greater granularity so that the age of minors can be determined more specifically, the requirement that content likely to meet the criteria for MA15+ be placed behind restricted access systems may be revisited.

²⁵² Virgin Mobile Australia, submission to the review, p. 8; and Hutchison Telecoms, submission to the review, p. 11.

²⁵³ OFLC, submission to the review, pp. 5–6.

The review finds that stored content meeting the descriptors for the X18+ and RC classifications should be prohibited in Australia from delivery over convergent communications devices.

While pre-assessment of content services could be undertaken at a number of points in the supply of the service, the responsibility would appear to fall appropriately to the content service provider. The mobile CSP would be required to ensure that a service likely to contain other than general content had been assessed and that consumer information was provided. The mobile CSP would appropriately share responsibility for ensuring that a restricted access system was in place as necessary.

The classification categories under the national classification scheme are well recognised by consumers in Australia. While they can be applied for use in contexts other than computer games, films on theatrical release and films for sale or hire, it is in the public interest that the integrity of the categories be retained. For that reason it would be necessary for content assessors to undertake appropriate training by the OFLC.

It would also be necessary to ensure that assessments made by OFLC trained industry assessors remained broadly consistent with OFLC guidelines. **The review finds that ACMA should periodically submit the content of a sample of assessments about which it received escalated complaints to the Classification Board for classification. ACMA would then be able to determine whether industry assessments were generally consistent with decisions made by the Classification Board.**

It is likely that a proportion of commercial stored content may already have been classified by the Classification Board – for example video-on-demand services made available through Australian ISP content portals. In that event, the service would be regulated under the proposed convergent content framework. **The review finds, however, that industry assessments would not be required provided that classification information including symbols and determined markings were presented in accordance with the national classification scheme.**

Similarly, the framework for regulating broadcasting services under the BSA provides an appropriate mechanism for the assessment of content and the development of consumer information. **The review finds that industry assessments may not be required for television programs delivered to convergent devices if they have been pre-assessed by broadcasters.**

The review finds that where a television channel is made available to convergent devices in such a manner as to conform with the definition of ‘broadcasting’ in the BSA, access restrictions under the BSA - including time zones if any - would apply. In the event, however, that a program was delivered to convergent devices independently of a broadcasting service, it would be required to meet the access restrictions of the convergent content framework.

17.2 Commercial ephemeral content

Content regulation in Australia is currently focussed overwhelmingly on stored content. The national classification scheme does not extend to transitory or ephemeral content (for example, interactive chat services and streamed audio-visual services). Schedule 5 to the BSA explicitly defines Internet content as information that is kept on a data storage device. And content streamed over the Internet is excluded from the definition of a broadcasting service under the BSA.

There is currently no comprehensive legislative framework for regulating ephemeral content. Telephone sex services are regulated under Part 9A of the TCPSSA, while the service provider determination for mobile premium services governs ephemeral premium text services operating on the 19x number range. The IIA codes of May 2005 provide for the assessment of the ‘likely or anticipated nature’ of ephemeral services provided on mobile CSPs’ content portals,²⁵⁴ although as noted in section 10.3 above, the definition of Internet content is limited to stored content in any case, meaning that that provisions of the IIA codes is voluntary in nature for content that does not meet that definition. Criminal offences under the Criminal Code apply irrespective of communications legislation.

The regulation of telephone sex services, as explained in section 11.2 of the report, is conceptually different from other content regulation in Australia. It relies on a genre-based technique which does not contain consumer information of the sort provided by reference to classification categories under the national classification scheme. While this binary test provides adequate consumer information where services are targeting a niche market and are offered only on restricted number ranges, it is not nuanced and does not provide consumers with information that is expressed in terms that are consistent with other media.

Until now, there has not been a significant market for ephemeral content offered on a commercial basis. While chat services on the Internet are highly popular and have experienced considerable growth, they are generally not offered commercially. It would be inappropriate to seek to regulate the free exchange of information between individuals except to the extent it breaches the criminal law.

In translating chat services from the Internet to mobile platforms, however, service providers have developed a commercial proposition for service delivery. Experience has shown that such services are freely delivered on the Internet, leading to strong consumer resistance for commercial models. In the mobile space, however, consumers are prepared to pay for chat and potentially other ephemeral, interactive services delivered to mobile devices.

Given the popularity of chat services generally and the early growth of commercially provided chat services over mobile platforms, it is likely that ephemeral services offered on a commercial basis will become significant drivers of the growth of convergent content services. This is supported by industry submissions to the review

²⁵⁴ IIA codes, subclause 16.4.

which canvassed the fact that services provided over mobile platforms already involve, and are likely to involve, the transmission of ephemeral content.²⁵⁵

The popularity of online communications services amongst children was evidenced by NetAlert and the ABA in the 2005 *kidsonline@home* report. The report, prepared by NetRatings Australia, found that 16 per cent of children between the ages of eight and 13 use Internet chat rooms and 40 per cent of children use instant messaging.²⁵⁶

The review finds that it would be inappropriate to regulate new ephemeral content services that are offered commercially as though they are, or will continue to be, niche services. Rather, it would be desirable to align the regulation of such services, to the extent possible, with general content regulation in Australia and with the approach for commercial stored content outlined above.

By this means and through a co-regulatory approach, consumers would have the benefit of consistent levels of consumer information and recourse to complaints processes where they believe inappropriate content to have been accessed.

17.2.1 Pre-assessment of content

The review has examined the feasibility of developing a regulatory approach to inappropriate ephemeral content that is more closely aligned with content regulation generally than is currently the case with respect to telephone sex services.

Service providers that offer ephemeral content services target particular demographics or interest groups. They do this both through the labelling of the service and through the means and placement of advertisements. For commercial reasons, therefore, service providers make informed assessments about the types of content that they provide on particular services.

Hutchison, outlining provisions of the then draft IIA code of practice, commented, in its submission to the review, that:

Where a content service will involve a real time or ‘live’ component and the service is reasonably likely, taking into account the advertising, content description and any other relevant factors, to contain sex, violence, nudity, drug use and/or adult themes, the proposed IIA Code provides for the service to be assessed on the basis of the likely or anticipated nature of that service. In this way, where the proposed live content is likely to contain adult material, the content can be subject to controlled access mechanisms.²⁵⁷

Having regard to the Classification Guidelines issued by the OFLC, the review notes that the terms used to describe classifiable elements in the classification categories MA15+ and above could provide a reference point for the assessment of ephemeral services provided commercially. While ephemeral services are not amenable to

²⁵⁵ See submissions to the review by Hutchison Telecoms, p. 11; Vodafone, p. 3; Optus, pp. 8–9; and Virgin Mobile Australia, p. 9.

²⁵⁶ NetRatings Australia Pty Ltd, *kidsonline@home: Internet use in Australian homes*, ABA and NetAlert, Sydney, 2005, p. 24.

²⁵⁷ Hutchison Telecoms, submission to the review, p. 11. Other carriers’ submissions to the review expressed support for the then draft IIA code.

classification in the strict sense, they could be assessed in terms that are consistent with the national classification scheme. This would have the benefit of providing generally consistent levels of consumer information as commercial ephemeral services move into the mainstream on convergent devices.

For instance, so called ‘flirt’ chat services would appear to fall within the following descriptors for MA15+:

- sexual activity may be implied;
- strong coarse language may be used; and
- aggressive or very strong coarse language should be infrequent.²⁵⁸

Existing telephone sex services would appear to fall within the following descriptors for the R18+ classification:

- sexual activity may be realistically simulated. The general rule is ‘simulation, yes—the real thing, no’; and
- there are virtually no restrictions on language.²⁵⁹

The review finds that it would be feasible to develop an assessment model for ephemeral content services that are offered commercially that, by reference to the classification categories under the national classification scheme, provides information to consumers about the strength of the content to which they or their families are likely to be exposed. It would be appropriate to require that services that are likely to contain content that falls within the classifiable elements associated with MA15+ and R18+ be subject to restricted access systems approved by ACMA.

Consistent with stored content services, ephemeral services with content elements that are likely to meet the descriptors for the X18+ and RC classifications should be prohibited in Australia.

As in the case of commercial stored content, pre-assessment of ephemeral content services could be undertaken at a number of points in the supply of the service. As with stored commercial content, the responsibility would appear to fall appropriately to the content service provider. The mobile CSP would, however, be required to ensure that a service likely to contain other than general content had been assessed and that consumer information was provided. The mobile CSP would appropriately share responsibility for ensuring that a restricted access system was in place as necessary.

Again, as in the case of commercial stored content, it would be necessary for content assessors to undertake appropriate training by the OFLC. It would also be necessary that mechanisms to ensure that assessments made by OFLC trained industry assessors remained broadly consistent with OFLC guidelines be applied to commercial ephemeral content as to stored content services.

²⁵⁸ OFLC, *Guidelines for the Classification of Films and Computer Games*, OFLC, Surry Hills, 2005, Federal Register of Legislative Instruments F2005L01286, p. 11.

²⁵⁹ *Ibid.*, p. 12.

17.3 Complaints handling

Content regulation generally recognises that Australian consumers expect to be able to complain about content that they believe to be inappropriate or illegal. Industry is therefore required to be accountable for the content it provides through the establishment of appropriate complaints handling processes.

With two notable exceptions, the first point for complaints is the service provider with escalated complaints decided by the regulator. First, under the online content scheme, complaints go directly to the regulator in recognition of the minimal control that ISPs have over the content accessed by consumers.

Second, under the self-regulatory scheme for premium rate services administered by TISSC, complaints are made directly to TISSC and not to Telstra which is the CSP providing the platform, or to individual content service providers. TISSC explicitly does not accept complaints about telephone sex services. While the enforcement regime for telephone sex services regulation (the investigation/evidentiary certificate process discussed in section 11.2) provides a de facto complaints process, its purpose is not the handling of complaints from consumers.

The review considers that an assessment model for commercial ephemeral content services that refers to the national classification scheme is feasible. In that context, it would be appropriate to establish a process for handling complaints about both stored and ephemeral services that have been assessed incorrectly.

The review is aware that the evidentiary certificate process for telephone sex services has raised practical concerns. The need to interact with the service in order to determine whether it is, in fact, a telephone sex service is problematic and presents difficulties in accurately determining the nature of the service.

In assessing complaints about ephemeral services under the framework for convergent content, it would be preferable that the process not require interaction with the service by employees of either the service provider or the regulator.

A complaints process could be established that required the CSP, upon receipt of a complaint of inappropriate content, to record the service in a manner and for a duration that had been determined by ACMA to be sufficient to evaluate complaints. For privacy considerations, it would be necessary to ensure that the information collected will not allow the identity of a consumer to be apparent or be reasonably ascertainable and that the data be retained only until the complaints process has been completed. It would also be necessary that consumers be advised that the service may be recorded, without personal information, for the purposes of complaints handling.

The data retained would enable both initial complaints investigation by CSPs and the investigation of escalated complaints by ACMA. Given that services would have been pre-assessed and those likely to contain content equivalent to MA15+ or R18+ placed behind restricted access systems, the review considers recording only upon complaint and for a specified period to be proportionate.

Consistent with content regulation across other media, the control that the mobile CSPs have over commercial content accessed on their portals and premium rate numbers and their existing relationship with customers places them in a suitable position to receive complaints about content. Further, in the case of ephemeral services, only the CSP will have the ability to initiate data retention. **The review finds, therefore, that where customers have complaints about the inappropriate assessment of commercially-provided stored or ephemeral content, they should contact their mobile CSP in the first instance. Escalated complaints would be directed to ACMA.**

It will be necessary for protocols to be established so that where commercial stored and ephemeral content services are available over more than one CSP's network, relevant CSPs are made aware of the results of complaints investigations. Complainants, content service providers and other CSPs should be able to appeal the decisions of CSPs for consideration by ACMA.

The inclusion of telephone sex services in the regulatory framework for convergent content will have the benefit of addressing practical concerns that have arisen in the evidentiary certificate process.

18 INAPPROPRIATE CONTACT

Governments worldwide share a concern that rapidly developing communications technologies may provide means for the exploitation of minors. Inappropriate contact with children, including so called paedophile ‘grooming’, as a result of online communication is a significant safety issue in the modern communications environment.

Following a short overview of recent initiatives in the area of online safety generally, this section of the report considers the particular concerns raised by new generation mobile services. These concerns were raised by several submitters to the review and have been the focus of substantive discussions with industry, both in the context of this review and consultation over the interim arrangements established by the then ACA.²⁶⁰

18.1 Recent initiatives in online safety

In Australia, the Criminal Code provides that certain uses of a telecommunications service, including the ‘grooming’ of children, are criminal offences. The telecommunications offences of the Criminal Code that underpin Australian Government policies regarding online safety were recently strengthened and updated. The use of mobile phones and other convergent communications devices are clearly captured by these provisions. Their operation and the effect of the changes which came into effect on 1 March 2005 were outlined in section 12 of the report.

Community awareness that online child sex exploitation is a criminal offence would have been raised by the considerable publicity surrounding the culmination of Operation Auxin in September 2004. Operation Auxin was a law enforcement investigation that involved the collaborative efforts of the AFP and all state and territory police agencies. It was the Australian arm of a worldwide investigation into the trafficking of online child sex images that was code named Operation Falcon.

Operation Auxin was coordinated by the Australian High Tech Crime Centre (AHTCC) which was established in 2003 to provide a coordinated, national response to modern technology-based crime. The AHTCC also played a central role in the establishment of the Virtual Global Taskforce (VGT) which comprises the AFP, the UK National Crime Squad, the Royal Canadian Mounted Police, the US Federal Bureau of Investigation, the US Customs and Interpol.

The VGT, which was launched internationally on 27 January 2004, is a partnership that aims to make the Internet a safer place for children. VGT members cooperate with other agencies working in the area of online safety, including ACMA and NetAlert in Australia.²⁶¹

²⁶⁰ See submissions to the review by NetAlert, p. 11; Young Media Australia, pp. 2–3; Australian Family Association (WA Branch), p. 2; and ABA and ACA, pp. 11–12. See also submissions to the review by Hutchison Telecoms, p. 17; Vodafone, pp. 3 and 9–10; Optus, p. 9, and Virgin Mobile Australia, p. 10; in which responses to child safety issues were discussed.

²⁶¹ Further information on the VGT can be found at www.virtualglobaltaskforce.com/index-corporate.html.

In the context of the 2004 Federal elections, and in the wake of Operation Auxin, the Australian Government committed to a National Child Protection Initiative focussed on online child sex abuse. As part of that initiative, the AFP is to receive an additional \$28.4 million over four years and has established the Online Child Sex Exploitation Team as a national centre for international and national referrals and investigation of online child sex abuse. NetAlert and the AFP were also allocated additional funding of \$5.7 million specifically for community education initiatives to ensure parents, teachers and community groups are better informed to help protect children online.

18.2 Contact issues in the mobile environment

Convergent communications devices potentially combine live interactive services such as chat, audiovisual capabilities and location determination. In this context, the review has considered the potential risk of inappropriate contact posed by mobile chat and by location based services.

18.2.1 Mobile chat services

The call for submissions paper to the review identified community concern in Australia and overseas that some features on mobile devices would lead to inappropriate contact, especially with children.²⁶² NetAlert, in its submission to the review, also noted that:

Participants in chat rooms will sometimes attempt to entice children into talking about sex in one form or another and paedophiles have been found in chat rooms in jurisdictions all over the world. There have been cases where children have met up with these people and as a consequence, have been seriously abused or worse.²⁶³

Other submitters to the review noted that dangers to children from paedophile grooming in chat rooms may be exacerbated in the mobile environment because of the inherent mobility and personalised nature of the devices.²⁶⁴ In large part these concerns relate to the reduced scope for parental supervision by comparison with the fixed Internet.

Another relevant consideration is the tension that sometimes exists between children's attitudes towards mobile phones and those of their parents. UK organisation, Childnet International, has undertaken research which indicates that, whereas children tend to view their mobile phones as a source of independence and freedom, parents look to them as a means of keeping track of their children.²⁶⁵ This would suggest that, in order to be effective, online safety messages in the mobile environment need to be nuanced and targeted to particular demographics.

²⁶² DCITA, *Review of the Regulation of Content Delivered over Mobile Communications Devices: Call for Submissions*, DCITA, Canberra, 2004, p. 5. See Attachment A to this report.

²⁶³ NetAlert, submission to the review, p. 16.

²⁶⁴ *Ibid.*, p. 13; ABA/ACA, joint submission to the review, pp. 11–12; and Young Media Australia, submission to the review, p. 3.

²⁶⁵ Professor Kirsten Drotner, 'Media on the Move: a Research Perspective', in *Children, Mobile Phones and the Internet: the proceedings of the experts' meeting in Tokyo, Japan*, Childnet International and the Internet Association, Japan, 2003, pp. 11–12.

In assessing the potential risk posed by mobile chat services, however, the review has identified countervailing factors that are considered. These include:

- chat services come in a variety of forms with differential risk levels;
- a range of safety measures can be implemented more feasibly in the mobile environment than over the fixed Internet;
- mobile CSPs (and law enforcement agencies) can identify consumers more easily and accurately than ISPs through customer information held by their networks;
- mobile CSPs have greater control over interactive services that are offered commercially either on their portals or by third parties than similar but non-commercial services on the Internet; and
- unlike the current ISP market in Australia in which some 600 players operate,²⁶⁶ the market structure in the mobile telecommunications sector is one in which there is only a small number of carriers, all of which attest to their regard for the integrity of their 'brand'.

In developing interim arrangements pending the outcome of the review, the ACA identified a range of mobile interactive services, including chat, the characteristics of which suggest different risk profiles. These services were outlined in section 6.4 and range from operator one-to-one services where all messages pass through the service operator to public group chat that allows open dialogue between unknown parties. In their joint submission to the ACA, industry associations AMTA and ADMA pointed out that different safety measures are appropriate for different types of service and that, in applying safety measures, it should be recognised that chat services are offered in the context of a dynamic market in which new types of services are constantly being created.²⁶⁷

A second countervailing factor is the safety measures that are available to chat service providers and/or CSPs in the mobile environment. These include:

- acceptable use policies;
- data retention;
- technical facilities that can be implemented by consumers, for example, an ability to block the numbers used by 'pest chatters' and exit commands including a soft exit key to allow participants to stop at anytime;
- electronic filtering;
- restricted access systems; and
- human moderation or monitoring.

While ISPs are able to respond to decisions made by ACMA under the online content scheme and to their obligations under criminal law, it would not be practicable for them pro-actively to implement human moderation or data retention on the fixed

²⁶⁶ 687 ISPs were operating in Australia in September 2004, according to the Australian Bureau of Statistics, cited in Communications Research Unit, *InfoByte: Internet Activity – Sept 04 – Part 2*, DCITA, 2005, p. 1.

²⁶⁷ AMTA and ADMA, *Joint AMTA and ADMA Submission to the ACA's Discussion Paper: 'Regulation of Mobile Premium Services'*, AMTA/ADMA, 2005, p. 13.

Internet both because of the huge quantity of material involved and ISPs lack of control of content accessed by consumers.

Thirdly, access to a website on the fixed Internet, including chat rooms, is logged in IP-address form. Identifying the account holder for an IP-address or range of addresses is a relatively simple matter for network administrators and, through them, law enforcement agencies. While it is possible to drill down to the particular user and computer that accessed a website at a given time, there is a range of other information that has to be cross-referenced in order to do so with accuracy. The variables that have to be considered in identifying users on the fixed Internet are likely to be greater than in the mobile environment where device hardware is more clearly linked to account holders. Although customer information about secondary mobile account holders may not be as complete as for the primary account holder, identifying the user is likely to be a more straightforward matter than for the fixed Internet.

As discussed in section 10.3 in relation to the application of the online content scheme to new content services, mobile CSPs have greater control over the content accessed by consumers where they are receiving a share of the revenue of the content service. This applies both to content on their portals and to third-party content accessed through their portals. The control that they can exercise extends to the application of safety measures to certain services, including chat and potentially other interactive content.

In this context, the regulatory framework for mobile chat could feasibly require greater consumer protections from CSPs and content providers than from traditional ISPs. However, the application of such protections should not be so heavy-handed as to be self-defeating. In the event that safety measures were to be viewed by consumers as overly interventionist or inappropriate to the risk associated with the particular service, they could inhibit the use of mobile chat and might encourage consumers to remain with Internet chat services, which due to their nature are less amenable to regulation.

In light of the above countervailing factors, the important role of corporate 'brand' to large companies such as the mobile CSPs should not be overlooked. All of the Australian mobile carriers, whether jointly through AMTA or in individual discussions, have emphasised to the review that they are concerned to be seen as acting responsibly about safety issues. They are also aware that their subscribers are likely to apply a traditional telephony mindset to the content services that they offer and are, therefore, likely to hold them more responsible for safety issues than they would ISPs when they access content over the Internet.

On the basis of the foregoing discussion, the review finds that there are grounds for concern that mobile chat and other interactive services will potentially lead to inappropriate contact, especially with children. However, there are also significant countervailing factors, such as the comparative ease of user identification, that, utilised correctly, mitigate that concern by comparison with the fixed Internet.

The review notes that the Government has recently strengthened Australian criminal law to ensure that appropriate penalties exist to address the illegal use of a

telecommunications services, including mobile devices, for the purposes of paedophile ‘grooming’. In addition, the review recognises that Australian law enforcement agencies are engaged in international collaboration to reduce the incidence and impact of online child sexual exploitation through the Virtual Global Task Force.

The review finds that where CSPs or content providers offer chat services commercially, they should be required to ensure that safety measures are in place that are appropriate to the risk associated with the particular service. The review recognises that this is a dynamic market in which new types of chat and interactive services are constantly being created. Industry players are best placed to anticipate and understand service offerings. Likewise, the range of safety measures that can be applied to new services can be expected to be dynamic. Some safety measures may be more practicable and effective for one service than for another. In this context, **the review finds that it would be preferable to allow industry some flexibility to determine the combination of safety measures that best suit their service offerings and their commercial and network structures.**

Mobile CSPs and content service providers should develop codes of practice addressing the issue of chat safety. These codes would identify safety measures that, in combination, provide a level of protection commensurate with the level of risk posed by the use of various types of mobile chat or other interactive services. They would be required to be approved and registered by ACMA, which would have the power to make an industry standard in the event the codes were not made or were found to be inadequate.

There is no single, failsafe solution to online safety in the modern communications environment. Technical and other safety measures are unlikely to be effective without ongoing consumer education and awareness-raising. In consultations with law enforcement agencies in the context of the interim arrangements, the ACA was advised that paedophiles are almost never explicit in their overtures to children online. In this context, neither technical filters nor human monitors, for instance, can be guaranteed to identify unsafe behaviour or prevent the inappropriate exchange of personal information.

The review finds that consumer education initiatives will be required to promote community awareness of the rapidly developing capabilities of convergent communications devices that, in the wrong hands, potentially provide means for the exploitation of children. The review notes that ACMA and NetAlert are already working with law enforcement agencies to promote community education about safe online behaviour under the National Child Protection Initiative. While these initiatives could be adapted to apply to the mobile environment, regard should be given to ensuring that they are suitably targeted to include children as well as parents and carers. Specific initiatives should also be developed by industry to raise awareness of potential safety issues in the convergent environment.

18.2.2 Location-based services

Different commercial models for location-based services on mobile devices were discussed in section 6.5 where the distinction was drawn between ‘active’ or ‘pull’

services that are initiated by the consumer and ‘passive’ or ‘push’ services that are not requested by the consumer.

Some kinds of LB service offerings can be seen as possessing both active and passive characteristics. For example, a service which allows an account holder to track the location of a second handset which is operated under the same account. The service would be initiated through a request on behalf of the account holder and in this way, is similar to ‘active’ LB services. However, as the tracking of the second handset could be undertaken without its user’s consent or knowledge, this type of service would clearly be of concern in the event that the account holder was not the parent or lawful guardian of the relevant minor.

In the United Kingdom, where passive services are available, there has been concern about the use of location determination in conjunction with chat services and games products.²⁶⁸

Several submissions to the review also raised concerns about the potential for misuse of passive location-based services, particularly with respect to exploitation of minors.²⁶⁹ Passive location-based services are not currently offered in Australia.

The responsibilities of Australian CSPs with respect to the privacy of their subscribers were outlined in section 13.3. In light of concerns raised in submissions, the review has considered the implications of those responsibilities to prospective passive location-based services in Australia.

Paragraph 276(1) of the Telecommunications Act provides that, subject to certain exceptions, an eligible person (in this case a mobile CSP) must not disclose any information or document that relates to:

- (i) the contents or substance of a communication that has been carried by a carrier or carriage service provider; or
- (ii) the contents or substance of a communication that is being carried by a carrier or carriage service provider (including a communication that has been collected or received by such a carrier or provider for carriage by it but has not been delivered by it); or
- (iii) carriage services supplied, or intended to be supplied, to another person by a carrier or carriage service provider; or
- (iv) the affairs or personal particulars (including any unlisted telephone number or any address) of another person;

It is likely that location information would fall within subparagraphs (iii) and/or (iv) of this prohibition. The *prima facie* position, therefore, is that a mobile CSP would be prohibited from using location information to supply a location-based service, and

²⁶⁸ See DCITA, *Call for Submissions*, 2004, at Attachment A, p. 5. The *IMCB Guide and Classification Framework for UK Mobile Operator Commercial Content Services* noted that commercial location-based services will be subject to a subsequent code of practice, IMCB, 2005, op cit., p. 4. The location-based services code is examined below.

²⁶⁹ See submissions to the review by Young Media Australia, p. 3; NetAlert, p. 13; and the Australian Family Association (WA Branch), p. 2.

would be prohibited from disclosing location information to another person, such as a third party location-based service provider, unless one of the exceptions to section 276 that are contained in Part 13 of the Telecommunications Act applied.

The only exception to section 276 in Part 13 of the Telecommunications Act of direct application would appear to be section 289 which provides that the prohibition does not:

...prohibit a disclosure or use by a person of information or a document if:

- (a) the information or document relates to the affairs or personal particulars (including any unlisted telephone number or any address) of another person; and
- (b) the other person:
 - (i) is reasonably likely to have been aware or made aware that information or a document of that kind is usually disclosed, or used, as the case requires, in the circumstances concerned; or
 - (ii) has consented to the disclosure, or use, as the case requires, in the circumstances concerned.

In situations where location information is being used to pinpoint the location of a mobile phone and thereby the location of the person with the phone, the account holder would need to have given informed consent to the use or disclosure of this information for this purpose in order for subparagraph 289(b)(ii) to apply. As any other person would use the account holder's phone on the basis upon which the account holder uses it, this consent would extend to disclosure and use of location information about someone other than the account holder (for example, where the phone has been lent to another person). In the case of a service like ChildLocate, outlined in section 6.5, the account holder would be the parent or legal guardian of the child (as minors generally cannot enter into mobile phone contracts).

In the case of active location-based services where service delivery is initiated by an action from the consumer requesting the location, for instance, of the nearest post office or requesting that a taxi be sent to the person's present location, such a request is likely to be taken as constituting informed consent.

Active location-based services were not raised by submitters to the review as posing a risk of inappropriate contact, rather market experience from overseas would suggest that they are likely to be welcomed by consumers as innovative and useful new service offerings. **The review finds that active location-based services are unlikely to raise issues of public policy concern.**

By comparison, **the review finds that there are grounds for concern that passive location-based services, if offered without appropriate safeguards, could be misused for illegal or inappropriate purposes.**

Part 13 of the Telecommunications Act includes an exemption, set out in s 291, which allows for the transfer of otherwise protected information between carriers and service providers in certain circumstances, for example in the context of customer porting:

291 Business needs of other carriers or service providers

- (1) Section 276 does not prohibit a disclosure or use by a person of information or a document if:
 - (a) the disclosure or use is made by or on behalf of:
 - (i) a carrier (the *first carrier*); or
 - (ii) a carriage service provider (the *first provider*); and
 - (b) the disclosure or use is made for a purpose of, or is connected with, any other carrier or service provider carrying on its business as such a carrier or provider; and
 - (c) the information or document relates to a person (the *third person*) who is a customer or former customer of:
 - (i) the first carrier or the first provider; or
 - (ii) the other carrier or the other provider; and
 - (d) the disclosure or use is made for a purpose of, or is connected with:
 - (i) the supply, or proposed supply, by the other carrier or other provider to the third person of a carriage service or a content service; or
 - (ii) the supply, or proposed supply, by the other carrier or other provider to the third person of goods or services for use in connection with the supply of a carriage service or a content service; or
 - (iii) the installation, maintenance, operation or provision of access to a telecommunications network or a facility, where the network or facility is used, or for use, by the other carrier or the other provider to supply a carriage service or a content service to the third person.
- (2) Section 276 does not prohibit a disclosure or use by a person of information or a document if:
 - (a) the disclosure or use is made by or on behalf of a carriage service provider; and
 - (b) the disclosure or use is made for a purpose of, or is connected with, an arrangement, or proposed arrangement, made by a carriage service intermediary for the supply of a carriage service by the provider to a third person; and
 - (c) the information or document relates to the third person; and
 - (d) the disclosure or use is made for a purpose of, or is connected with:
 - (i) the supply, or proposed supply, by the provider to the third person of that service; or
 - (ii) the supply, or proposed supply, by the provider to the third person of goods or services for use in connection with the supply of the first-mentioned service; or
 - (iii) the installation, maintenance, operation or provision of access to a telecommunications network or a facility, where the network or facility is used, or for use, by the provider to supply the first-mentioned service to the third person.
- (3) Section 276 does not prohibit a disclosure or use by a person of information or a document if:

- (a) the disclosure or use is made by or on behalf of a carriage service intermediary; and
- (b) the disclosure or use is made for a purpose of, or is connected with, an arrangement, or proposed arrangement, made by the intermediary for the supply of a carriage service by a carriage service provider to a third person; and
- (c) the information or document relates to the third person; and
- (d) the disclosure or use is made for a purpose of, or is connected with:
 - (i) the supply, or proposed supply, by the provider to the third person of that service; or
 - (ii) the supply, or proposed supply, by the provider to the third person of goods or services for use in connection with the supply of the first-mentioned service; or
 - (iii) the installation, maintenance, operation or provision of access to a telecommunications network or a facility, where the network or facility is used, or for use, by the provider to supply the first-mentioned service to the third person.

It appears that this exemption may operate in certain, limited, circumstances involving more than one carrier and/or service provider, to allow for the use and disclosure of location information without a user's consent or knowledge.

The potential application of the exemption in s 291 suggests an alternative means of protecting against the privacy and safety issues associated with passive services should be pursued.

Given that concerns about the misuse of passive LB services directly relate to the lack of consent and knowledge of the end user, **the review finds that it would be appropriate to require the consent of an account holder prior to the use or disclosure of location information relating to any handsets operated under an account.**

This approach would be consistent with regulatory treatment of such services overseas. The European Union adopted requirements in 2002 that processing of location tracking information for value-added services should be permitted only where end users have given their consent, and that end users should be provided with a simple means to temporarily deny the processing of location tracking information.

An obligation of this sort would provide sufficient safeguards to prevent abuse of passive location-based services with respect to adults. Further measures will be required however where services are offered that would identify the location of minors. Procedures will be required to validate that account holders requesting a service that would locate secondary account holders that are minors have the legal authority as parent or guardian to do so.

In the United Kingdom, for instance, an industry code of practice that applies to CSPs and location-based service providers requires that:²⁷⁰

- only a parent or guardian can open an account to track a child under 16, and must provide ID and proof of address. The address must be checked before the service is activated;
- active consent must be sent from the device to be located, and there must be ‘secure measures’ to ensure that the consent was sent from that device and was not ‘spoofed’ from another device;
- a confirmation SMS or email must be sent to the device;
- randomised SMS alerts must be sent to the device advising that it can be located by other parties;
- safety information must be available by phone , Internet and WAP;
- consumers with devices that can be located should be able to obtain information persons that can locate them; and
- location-based services must be easy to stop or suspend.

The review finds that location-based services which allow an account holder to locate secondary account holders that are minors should not be made commercially available by mobile CSPs in Australia prior to seeking agreement of ACMA (in consultation with the AFP) that appropriate safeguards are in place. In the event that agreement is not obtained, ACMA should determine whether the service should be made available. It would also be appropriate to require mobile CSPs to ensure that contractual arrangements with LB service providers include an obligation to seek the agreement of ACMA prior to the commencement of these services.

In a dynamic communications market, it is likely that there will be other new and innovative services not yet available either in Australia or overseas, that may give rise to concerns about child safety. **The review finds that ACMA should continue to work with law enforcement agencies to ensure that appropriate consultative mechanisms are developed and maintained to facilitate exchange of information between CSPs and law enforcement agencies.**

²⁷⁰ While the code of practice itself is confidential, an outline of the code is available as *Code of Practice for the Use of Mobile Phone Technology to Provide Passive Location Services in the UK*, 24 September 2004, www.orange.co.uk/documents/regulatory_affairs/lc_cop_locationservices_outline_240904.pdf, viewed 4 May 2005.

19 MOBILE INTERNET ACCESS

The near ubiquitous use of 2.5G cellular networks in Australia, which provide data speeds comparable to fixed dial-up Internet access, has been accompanied by the increasing availability of mobile devices capable of accessing the Internet over these networks.

The potential popularity of mobile Internet access is expected to be high. Network Strategies suggested that browsing for free information (content for which the consumer is only charged for data carriage) with a mobile device will be the single highest revenue stream for the mobile sector.²⁷¹ The ITU noted that while growth in Internet users has slowed between 2000 and 2003, growth in mobiles has continued to accelerate,²⁷² with mobile Internet access being of particular relevance where fixed-line Internet access is either not practical, or not commercially viable.²⁷³

Where mobile CSPs provide access to the open Internet using convergent communications devices, they are providing the same service as a traditional ISP and do not have control over the content accessed by consumers. Submissions to the review supported this view. For example, Vodafone noted that:

a customer may access services via:

- i) Direct Vodafone proposition such as Vodafone live!;
- ii) A third party wholesale provider, where Vodafone provides the billing mechanism, for example via SMS 'short code'; and/or
- iii) WAP/mobile Internet.²⁷⁴

Mobile CSPs that offer content services on proprietary portals can choose not to offer Internet access to their subscribers. Hutchison, in its submission to the review, noted that content provided over mobile networks is based on IP and that the MNO has flexibility to determine which IP-networks the MNO's subscribers can access.²⁷⁵ Similarly, Virgin Mobile noted that

...if a service provider does not provide open Internet browsing for example, subscribers will not be able to access the Internet through that provider's service even if the device would support such access.²⁷⁶

It is not possible, therefore, for a consumer to access open Internet content over a cellular network without the mobile CSP providing that access.

The then ABA and ACA, in their joint submission to the review, noted that:

²⁷¹ Network Strategies Limited, *op cit.*, p. 36. Note, however, that this would include browsing for free information within an MNO portal.

²⁷² ITU, *op cit.*, p. 3.

²⁷³ See *ibid.*, chapter 5.

²⁷⁴ Vodafone, submission to the review, p. 4. See also Optus, submission to the review, pp. 12–13; and Hutchison Telecoms, submission to the review, p. 5..

²⁷⁵ Hutchison Telecoms, submission to the review, pp. 3–4.

²⁷⁶ Virgin Mobile Australia, submission to the review, p. 5.

Some MNOs have taken steps to limit customers' access to the wider Internet and to other content beyond that which is provided on MNO portal sites and through premium rate messaging services.²⁷⁷

Where mobile CSPs choose to act as ISPs they are subject to the regulatory obligations imposed by the online content scheme, namely, Schedule 5 to the BSA and the Internet industry codes of practice.

Two issues have emerged that potentially impact on the effectiveness of the online content scheme when applied to Internet access over convergent communications devices. These are discussed in the following sections and are:

- under-age account holders; and
- filtering requirements.

19.1 Under-age account holders

Clause 60 of Schedule 5 to the BSA sets out a range of matters with which the Internet industry codes of practice must deal. These include restricting access accounts to persons aged 18 years and over unless the consent of a parent or responsible adult has been obtained.²⁷⁸ Accordingly, subclause 10.1 of the IIA Content Code 2 states that:

ISPs must take reasonable steps to ensure that Internet access accounts ('access accounts') are not provided to Minors without the consent of a parent, teacher or other responsible adult.

In Australia as overseas, subscriber growth in mobile telecommunications has been driven in recent years by a continued increase in pre-paid customers, to the extent that pre-paid services are currently estimated to account for around 46 per cent of total Australian mobile subscribers.²⁷⁹ Pre-paid services offer an inexpensive way to enter the mobile market without the credit-worthiness checks associated with post-paid mobile contracts, and allow consumers to better manage their mobile phone expenditure. These features have proved particularly popular with the youth market.

Handsets associated with pre-paid accounts currently tend to be at the lower end of the phone handset market—they tend to be less expensive and have less functionality than handsets associated with post-paid accounts. Open Internet browsing is currently not generally, or at least easily, available on such handsets.

As noted in section 4.1, device limitations and network constraints have meant that where available, Internet browsing over 2.5G networks has not been a generally satisfying user experience. Not only are access speeds relatively slow but many current devices are unable to view content-rich websites.

²⁷⁷ ABA/ACA, joint submission to the review, p. 9.

²⁷⁸ Paragraph 60(1)(c).

²⁷⁹ Communications Research Unit, *InfoByte: Mobile Phone Subscriptions December 2004*, DCITA, 2005, p. 1.

There is nothing, however, to prevent a consumer from using a handset he or she already owns and connecting to a mobile network through a pre-paid account. And in that case, assumptions should not be made about the functionality of devices. For instance, children can be given previous generation handsets by their parents that have high levels of functionality. Also, as the functionality of devices generally increases, Internet-enabled phones can be expected to be available at the lower end of the market.

Faster, more powerful devices for 2.5G networks will progressively be made available in the short term. In addition, the mobile networks themselves will provide the bit rates necessary for a satisfactory Internet experience. During 2005, the Hutchison and Optus WCDMA and Telstra EV-DO networks will be extended, and two more WCDMA networks are to be launched. These 3G networks provide broadband mobile Internet access and the corresponding handsets are able to access, process and display more resource-hungry, rich content.

By comparison with the fixed Internet, relatively high download charges may serve to limit Internet browsing on mobile devices by the youth market. However, mobile CSPs may choose to attract customers to non-voice services by reducing charges.

The review finds that mobile CSPs should meet their obligations under the online content scheme when making Internet access available to pre-paid customers. This issue may need to be monitored by ACMA and considered in future IIA code review processes. The personal credit information necessary to establish post-paid accounts would seem already to meet the obligations of ISPs with respect to access accounts.

As noted above, the relevant IIA code requires ISPs to take ‘reasonable steps’ to ensure that Internet access accounts are not provided to children without adult consent. Subclause 10.2 of the code provides the following examples of what ‘reasonable steps’ may entail:

- (a) requiring that access accounts can only be opened using a valid credit card; or
- (b) requiring any application to open an access account to be accompanied by some other form of identification by which the age of the applicant can be reasonably ascertained. Examples of identification that would satisfy this clause include a valid drivers licence or passport; or
- (c) placing a prominent notice on the packaging in which the access account is marketed that applicants who are Minors should obtain the consent of a parent, teacher or other responsible adult prior to using the access account; and
- (d) offering IIA Family Friendly Filters in association with the access account, or otherwise taking reasonable steps to ensure that the access account does not provide access to Prohibited Content or Potential Prohibited Content, such as by means as a closed content system; or
- (e) including in the access account registration process a requirement that the applicant confirms that he or she is not a minor, or that the

consent of a parent, teacher or other responsible adult prior to using the access account.

[Interpretive note: At least one of either (a), (b) or (c) together with either (d) or (e) must be done]

19.2 Filtering requirements

Filtering technologies can limit the Internet content consumers can access by preventing or blocking access to specified types of content. As noted in section 10.1.3 above, the availability of filter products is a central component of the online content scheme. Developments in filtering technologies together with the operation and effectiveness of the current filtering arrangements were also significant issues for the Schedule 5 review.

Subclause 60(2) of Schedule 5 requires the Internet industry codes to provide procedures for ISPs to follow to deal with prohibited overseas-hosted content; for example, to provide filtering. To this end, the IIA codes set out a requirement for ISPs to provide their subscribers – on a cost recovery basis – with a ‘IIA Family Friendly Filter’ product, which is a filter which meets the requirements listed in Schedule 1 to the codes, and is registered by the IIA.²⁸⁰

As outlined in section 10.1.4, ACMA issues take-down notice to ICHs for prohibited content hosted in Australia and refers prohibited overseas-hosted content to the makers of the scheduled filters so that the filters are updated to subsequently block access to the content.

In the fixed environment, filter products are available that, broadly speaking, operate at the user’s PC and at the ISP-level. The more effective filter products use complex ‘analysis’ filtering techniques to assess the content of a webpage prior to providing access to the page. These techniques are most practicable in PC-based products, where the filter is required to deal with the requests of only one computer. They can have a significant impact on network performance at the ISP-level.

The filters that are required under the online content scheme operate at the PC-level. The Schedule 5 review found that analysis filtering was not practicable at the ISP-level and that the URL or IP based techniques that were practical at that level were less accurate and subject to over-blocking.²⁸¹

Filtering technologies are not yet developed for the mobile environment to the same extent as for the fixed. In fact, industry submissions to the review were inconsistent both in their account of the development of filter technologies for mobile Internet access and the most practical level at which they would operate.

For instance, Virgin Mobile, in its submission to the review, envisaged that device-level filters would be developed for mobile devices and that handsets that are able to install filters could be developed in the near future. Virgin Mobile suggested that

²⁸⁰ IIA codes version 10.4, May 2005, subclauses 4.1 and 19.3 and Schedule 1. The codes are available at www.iaa.net.au/contentcode.html, viewed 1 June 2005.

²⁸¹ DCITA, *Report of the Review of the Operation of Schedule 5 to the Broadcasting Services Act 1992*, DCITA, Canberra, 2004, pp. 23-24.

device-level filters for mobile handsets would either be downloaded through the cellular network or installed through memory card-style devices.²⁸²

Optus argued that device-level filtering was problematic because of the current processing and memory limitations of handset devices. However, it also expressed the view that ISP-level filtering is ‘currently not a practical, efficient or commercially viable method of controlling access to age-related content’.²⁸³ The ABA and ACA, in their joint submission, shared the former view suggesting that ‘...technical limitations of mobile devices currently constrain the development of filter software that is comparable to that available for personal computers’.²⁸⁴

At the same time, other submitters noted that network or ISP-level filtering technologies were being developed for the mobile market. For instance, ADMA in its submission, cited filter products being developed by Telcotec and Puresight Inc but stressed that it was not able to comment on the commercial viability of filtering solutions at the current time.²⁸⁵ The ABA and ACA stated that filtering software vendors are currently adapting their products for the use in the mobile environment and that server-level filtering may be an option in the interim.²⁸⁶

The review is aware that in the second half of 2005, Vodafone Ireland intends to provide its mobile customers with an Internet content filter, which will operate at the ISP-level. The review understands that this product has been developed wholly by Vodafone, which intends to make it available to its mobile customers in other countries, including Australia, following its roll out in Ireland. Internet content configured for mobile devices is more dynamic than ‘conventional’ Internet content and is therefore inherently more difficult to filter.

On the basis of the evidence available to it, **the review finds that filtering technology, whether at the ISP or device-level, is currently not commercially available for mobile Internet access.** Given sufficient demand, there may be rapid advances in the development of mobile filter products. It is likely, however, that ISP-level filters will be available in the short term and in advance of device-based products.

The review notes the findings of the Schedule 5 review with respect to the costs of mandating ISP-level filtering:

There are a number of practical difficulties in mandating URL/IP based filtering at the ISP-level, including accuracy rates and, according to the Internet industry, impact on broadband. Ovum has estimated that URL/IP based filtering would involve implementation costs of approximately \$45 million and ongoing costs of more than \$33 million per annum. Such costs could significantly impact on the financial viability of smaller ISPs, in particular. Given the limited benefits of an ISP-level filtering system, the costs of a mandated requirement to filter do not appear justified.²⁸⁷

²⁸² Virgin Mobile Australia, submission to the review, p. 7.

²⁸³ Optus, submission to the review, p. 17. See also Virgin Mobile Australia, submission to the review, p. 7.

²⁸⁴ ABA/ACA, joint submission to the review, p. 11. A similar point is also made at p. 30.

²⁸⁵ ADMA, submission to the review, pp. 5–6.

²⁸⁶ ABA/ACA, joint submission to the review, p. 30.

²⁸⁷ DCITA, 2004, op cit., p.23.

Virgin Mobile referred to these findings in its submission to the review.²⁸⁸

Given the early stage of filtering technologies for mobile Internet access, it is not possible to determine the costs to industry of mandated ISP-level mobile filtering. At an appropriate time in the development of mobile filters, ACMA and the mobile CSPs should undertake further work on this issue.

The review also notes the finding of the Schedule 5 review that only simple URL/IP techniques for content filtering are feasible at the ISP-level and suggests that ACMA, potentially in cooperation with NetAlert, could examine the relative effectiveness of ISP-level filters in the mobile and fixed environments.

While it is likely that ISP-level filters will be commercially available in the short term, there is significant further work to be done with respect to both effectiveness and cost before a decision could be made to mandate ISP-level filters for mobile Internet access.

In the absence of content filters, mobile CSPs that offer Internet access would appear to be non-compliant with the online content scheme.

However, given the commercial investments made already, the likely consumer demand for mobile content services and the significant economic and personal benefits likely to be gained from greater connectivity, it would be undesirable for this finding to have a negative effect on the availability and take-up of mobile content services in Australia. This view does not, however, provide mobile CSPs with grounds for inaction.

As noted by Vodafone in its submission to the review, filtering is just one of a number of tools that may be available to consumers to manage their and their families' Internet experience. Given that the development of filter technologies can be expected to lag behind the development of access technologies, the current situation is likely to be repeated in the future as new access technologies are developed. **The review finds that an alternative approach to providing community safeguards pending development of filter products is necessary.** A potential arrangement is outlined in the following subsection.

As outlined in section 5.2, consumers commonly use technologies such as cellular PCMCIA cards, to connect desktop and laptop PCs to the Internet. The review notes that these devices are capable of running device-level filtering software. Likewise, where consumers utilise their handsets as a means to connect a PC to the Internet via a data cable or similar, filtering software may also be installed. Where filters are commercially available, ISPs should meet their obligations under the online content scheme. Alternative arrangements should only apply where content filters are not viable.

²⁸⁸ Virgin Mobile Australia, submission to the review, p. 7.

19.2.1 Non-filtering-based protocol

Filter products are just one of a range of tools that may assist consumers manage their Internet experience and that of their families. No technological solutions are likely to be failsafe. In this context, the online content scheme explicitly recognises the central importance of community education.

The review finds that the online content scheme should be amended to provide ACMA with the flexibility to exempt ISPs from filtering requirements in situations where the development of filter technologies lags behind new devices and operating systems that enable Internet access. Such exemptions would be conditional on carriers having implemented sufficient non-filtering based community safeguards.

Where filter products are not available for existing and future Internet access technologies, the review suggests that ACMA and NetAlert should monitor relevant filter technology developments and alternative access management strategies.

The review recognises Parliament's intention in establishing the online content scheme: that inappropriate Internet content be addressed in some way. The explanatory memorandum to the Bill that enacted Schedule 5 stated the Government's view that '...it is not acceptable to make no attempt at all on the basis that it may be difficult'.²⁸⁹ ISPs should be required to investigate the application of filters and alternative access controls as technologies emerge for which filter products are initially not available. **At such time as filter technologies become commercially feasible, ACMA should remove the exemption from filtering requirements for that access technology.**

In the meantime, consumers purchasing Internet enabled devices or Internet access services for which content filters are not available should be advised of that fact and offered the option of selecting another device or barring Internet access. This arrangement would approximate the requirement that a scheduled content filter be available to ISPs' subscribers on demand and that ISPs have a responsibility to promote content filters to their subscribers.

²⁸⁹ Broadcasting Services Amendment (Online Services) Bill 1999 Revised Explanatory Memorandum, p. 2.

20 OTHER ISSUES RAISED

20.1 Australian content

In its submission to the review, the Australian Film Commission suggested that:

...the merged authority, the ACMA, monitor local content on mobile communications devices in order to track their development as important new content delivery platforms and the levels of Australian content available.²⁹⁰

Similarly, the Media Entertainment and Arts Alliance argued that some types of programming provided to mobile devices may, in the future, be contain much overseas-produced material and that it would be essential, therefore, to monitor levels of Australian content.²⁹¹

Rules requiring specified levels of Australian content on television and radio exist in order to:

...promote the role of broadcasting services in developing and reflecting a sense of Australian identity, character and cultural diversity, by supporting the community's continued access to television programs produced under Australian creative control.²⁹²

The requirements for television licensees work differently for commercial and subscription broadcasters. Commercial television broadcasters in Australia are subject to broadcast quota requirements that have been imposed by ACMA pursuant to s.122 of the BSA. Licensees must broadcast 55 per cent Australian programming between 6am and midnight and 80 per cent of Australian advertising between 6am and midnight.²⁹³ The BSA provides that ACMA cannot lower these requirements for Australian content below the current levels.²⁹⁴

Subscription television broadcast licensees are subject to an expenditure quota. Part 7, Division 2A, of the BSA requires that if a licensee offers a drama channel, either the licensee or the person providing the channel to the licensee is required to spend a minimum of 10 per cent of total program expenditure on new eligible Australian drama programs.

The review notes the success of Australian content providers and aggregators in developing content for the Australian market. In its 2004 report, *Economic Significance of the Australian Mobile Telecommunications Sector*, the Allen Consulting Group noted the work of Ericsson and Hutchison in fostering Australian program developers.²⁹⁵ The report also highlighted some of the content services provided by Hutchison on its On3 platform, many of which are Australian services.²⁹⁶

²⁹⁰ Australian Film Commission, submission to the review, p. 9.

²⁹¹ Media Entertainment and Arts Alliance, submission to the review, pp. 9–10.

²⁹² Australian Broadcasting Authority, *Explanatory Notes – Australian Content Standard*, ABA, Sydney, 2003, p. 1.

²⁹³ The programming content quota is contained in the Broadcasting Services (Australian Content) Standard 1999. The advertising requirement was set by the ABA's forerunner, the Australian Broadcasting Tribunal, in 1992 and is contained in Television Program Standard 23.

²⁹⁴ Subsections 122(5) and (6).

²⁹⁵ Allen Consulting Group, 2004, op cit., pp. 16–17.

²⁹⁶ Ibid., p. 15.

The review also notes the work of the Australian Interactive Media Industry Association (AIMIA) in fostering the development of Australian content for mobile platforms. AIMIA has formed the Mobile Content Industry Development Group to foster industry cooperation and develop the content, application and services markets.²⁹⁷

The Australian Government is also working towards the development of the digital content industry through the Digital Content Industry Action Agenda (DCIAA), which was launched in 2001. The DCIAA has appointed a leaders' group, whose terms of reference include to:

- contribute to the identification of critical strategic issues facing the industry, including impediments to the industry's competitiveness and opportunities for growth;
- provide a forum for the key industry players to articulate their views on issues affecting industry development and consult with Government on possible policy options;
- provide leadership to the industry, facilitate communication and linkages within industry and build industry ownership and commitment to the Action Agenda;
- identify appropriate and agreed actions for government and industry which will comprise the action agenda; and
- be advocates for the action agenda.²⁹⁸

The review considers that these projects are likely to identify areas of concern in relation to Australian content provision over mobile platforms. Further, the review notes that platforms that provide broadcasting services will remain subject to the Australian content requirements placed upon those services by the Australian Content Standard and the BSA.

In its submission to the review, the Australian Film Commission suggested that the Annex II reservation to the Australia-US Free Trade Agreement (AUSFTA) could apply to mobile telephony services.²⁹⁹ Annex II reserves the power of the Australian Government to take measures to ensure that Australian content on new interactive media platforms is not unreasonably denied to Australian consumers, should it determine that Australian material is not readily available to them.³⁰⁰ The review notes that while the AUSFTA does not define the term 'interactive audio and video services', this is because any attempt to do so using concepts as they are understood today may limit the capacity of a government in the future to regulate new types of interactive services.

²⁹⁷ See www.aimia.com.au/i-cms?page=1.35.1093.1094, viewed 14 March 2005, for further information.

²⁹⁸ See www.dcita.gov.au/arts/film_digital/digital_content_industry_action_agenda, viewed 14 March 2005, for details.

²⁹⁹ Australian Film Commission, submission to the review, p. 4.

³⁰⁰ AUSFTA, Annex II – Australia, p. 6.

20.2 Intellectual property and digital rights management

The Australasian Performing Right Association Limited and the Australasian Mechanical Copyright Ownership Society Limited, in their joint submission to the review, noted that:

...an appropriate method to protect Australian consumers and copyright owners from unlicensed content is by way of take down notices issued to carriers and service providers in respect of unlicensed content to which they enable access to, and are in a technical position to terminate access to.³⁰¹

The review notes that intellectual property law and policy is the responsibility of the Attorney-General, but considers that given the fact that this is an issue of negotiation between industry players in relation to a body of law already developed, measures to facilitate the protection of intellectual property would be an appropriate matter to be considered by an industry code of practice.

³⁰¹ Australasian Performing Right Association Limited and Australasian Mechanical Copyright Ownership Society Limited, joint submission to the review, p. 4.

**ATTACHMENT A CALL FOR SUBMISSIONS AND TERMS OF
REFERENCE**



Australian Government

**Department of Communications,
Information Technology and the Arts**

**REVIEW OF THE REGULATION OF CONTENT DELIVERED OVER
MOBILE COMMUNICATIONS DEVICES**

Call for submissions

INTRODUCTION

1. The rapidly developing capabilities of mobile phones and other mobile communications devices to act as multi-media platforms and, in particular, to deliver audiovisual and other content 'on demand' can be expected to bring substantial benefits. Notably, these include improved services for users and new business opportunities for content and service providers.
2. At the same time, the capabilities offered by these devices raise a range of issues for governments and regulators and for the users of such devices. The Australian Government needs to consider whether existing policy and regulatory arrangements for the management of potentially offensive or harmful content provide adequate community safeguards in view of the new and emerging services delivered to these devices.
3. Mobile telephones offer an increasing range of premium rate services³⁰², like Short Message Services (SMS) and Multimedia Message Services (MMS), which deliver text based and/or audiovisual content. Some mobile telephone providers also offer other audiovisual content, including access to proprietary network services³⁰³ or the Internet. Some of the content available on such services is of an adult nature.
4. The Minister for Communications, Information Technology and the Arts (the Minister) issued a direction on 13 May 2004 to the Australian Communications Authority (ACA) to make a service provider determination to prohibit the supply of X or RC material, and to develop appropriate measures to restrict access to adult services supplied by way of a premium SMS or MMS service or a proprietary network service. The ACA is further directed to make a service provider determination that requires adult MMS and SMS to be provided only on number ranges specified by the ACA. These arrangements provide consumers with protection against the inappropriate supply of adult content while the Government considers whether additional or alternative measures are required to respond to evolving platform and service delivery arrangements.

³⁰² On 13 April 2004, the Minister determined that such services include a carriage or a content service supplied by way of a call to a number with an eligible prefix and/or a public mobile telecommunications service that enables the end-user to access a propriety network. See paragraph 4 of the *Premium Service Determination 2004 (No.1)* (the Determination).

³⁰³ Under the Determination, a *proprietary network* means a telecommunications network used by a mobile carriage service provider to enable customers of that provider to access a premium content service by way of a mobile device where that service is not otherwise generally available.

5. To facilitate that consideration, the Minister has also instructed the Department of Communications, Information Technology and the Arts (the Department) to undertake a review of the existing regulations applying to audiovisual and other content, including adult services, provided or likely to be provided on mobile telephones and similar devices.
6. The review seeks to understand how new devices will operate, the features they will contain and the types of services likely to be offered. It will take into account the consumer and economic benefits these developments can bring. The review will also examine whether there are potential user safety issues arising from new and emerging capabilities (or services) of mobile communications devices including, for example, services that facilitate contact, such as geo-locational capabilities or chat services. The Review's terms of reference are attached.
7. The sixth term of reference provides a range of issues that should be taken into account in the conduct of the review. It notes that, where similar services are also available through other delivery platforms, it would be desirable that any regulation of services is applied in a consistent and technologically neutral manner. This is consistent with existing communications regulatory policy³⁰⁴ which requires services to be regulated in a manner that does not impose unnecessary financial and administrative burdens on service providers and readily accommodates innovation and technological change.
8. While the review will take into account existing regulatory measures, it will examine whether the distinct nature of these new services may influence the effectiveness of existing regulation and/or may contribute to new or increased social risks which would warrant reassessment of existing regulatory measures.
9. The review is also required to consider the implications of any proposed measures for the investment in, and the commercial development of, new communications platforms in Australia and will examine relevant international developments.
10. The Minister, together with the Minister for Justice and Customs, announced on 25 June 2004 the introduction to Parliament new provisions under the Criminal Code which, amongst other things, would provide for explicit offences related to the use of the Internet for paedophile grooming and the procurement or attempted procurement of children. While the review will consider the interaction of existing and proposed regulations under State/Territory and Commonwealth criminal laws aimed at child protection and criminal activity using communications devices, they are not the subject of this review.

Existing regulatory arrangements

11. The review seeks to take account of the scope of existing frameworks that regulate the manner in which content is delivered to communications platforms. In the context of this review the most relevant are:
 - Schedule 5 to the *Broadcasting Services Act 1992* (BSA) which provides for the Online Content Scheme (the Scheme). The Scheme establishes a complaints-based regime, using the national classification system established under the *Classification (Publications, Films and Computer Games) Act 1995* (the Classification Act) to

³⁰⁴ See s. 4 of the *Broadcasting Services Act 1992* and ss. 3 and 4 of the *Telecommunications Act 1997*.

regulate the Internet content delivered via an Internet carriage service and seeks to protect end-users, especially children, from inappropriate content online. It has three main components: complaints investigation; Internet industry codes of practice; and non-legislative initiatives such as community education, research and international liaison. As discussed below under the fourth term of reference, the application of Schedule 5 in relation to other audiovisual content, such as content on proprietary network services, is to be considered by this review;

- the *Telecommunications (Consumer Protection and Service Standards) Act 1999* which regulates access to premium rate voice sex services. Voice sex services are identified as a certain ‘genre’ of services with associated restrictions and requirements placed on the operation of those services. This differs from the approach applied under Schedule 5 to the BSA which uses the national classification system established under the Classification Act as the basis for defining *prohibited content* or *potentially prohibited content*³⁰⁵ under the Online Content Scheme; and
- Regulation 3.12 of the *Telecommunications Regulations 2001* gives the ACA powers to make service provider determinations regarding the supply of, and access to, premium rate services (other than voice sex services). On 13 May 2004 the Minister directed the ACA to make a service provider determination to require mobile service providers to put in place appropriate restrictions on access to adult content on both the 19x number range and proprietary networks. In particular, these measures will:
 - restrict access to content that is, or would be, classified “MA”³⁰⁶ or “R” by the Classification Board³⁰⁷;
 - prohibit supply of content that is, or would be, “X” rated or refused classification by the Classification Board; and
 - require SMS and MMS adult content to be supplied on designated number ranges.

12. Other relevant measures include:

- the *Classification (Publications, Films and Computer Games) Act 1995* which establishes the classification system for film, computer games and certain publications, including the National Classification Code. As noted above, the national classification system established under the Classification Act is referenced in the Online Content Scheme and in the ministerial direction to the ACA in relation to premium mobile content;
- State and Territory laws which impose obligations on producers of content and persons who upload or access content, and the Commonwealth *Crimes Act 1914* which makes it an offence to intentionally use an Internet carriage service with the

³⁰⁵ Internet content hosted in Australia is *prohibited content* if classified X or RC or content classified R not subject to a restricted access system. Internet content hosted outside Australia is *prohibited content* if classified X or RC. *Potentially prohibited content* is content that has not been classified, but if it were to be classified, there is a substantial likelihood that the Internet content would be *prohibited content*. Refer to Part 3 of Schedule 5 to the *Broadcasting Services Act 1992*.

³⁰⁶ The rating “MA” will change to “MA15+” from May 2005.

³⁰⁷ ‘Classification Board’ means the Classification Board established by the *Classification (Publications, Films and Computer Games) Act 1995*.

result that another person is menaced or harassed, or in such a way as would be regarded by reasonable persons as offensive³⁰⁸;

- the *Interactive Gambling Act 2001* (IGA) which regulates the delivery of interactive gambling services in Australia. While online casino-style gaming (online poker and casino-types games such roulette) is illegal under the IGA, online wagering on racing and sports events and online lotteries are permitted. The IGA is currently subject to a wide-ranging review. Consideration of the IGA will be restricted to its continued relevance and application in the event interactive gambling services become available on mobile communications devices in Australia; and
- the BSA also provides licence conditions that apply to categories of broadcasting services, including subscription narrowcasting services. The review is interested to know whether service providers consider that the services they offer, or are planning to offer, fall within existing licence categories under the BSA.

ISSUES

13. The terms of reference for the review require the Department to:

- 1. Identify new and emerging communications devices and platforms, capable of receiving and delivering audiovisual services (including text), and related features.**

14. Currently, there are a number of devices with multiple communications capabilities, including some 2.5G and 3G mobile telephones, Personal Digital Assistants (PDAs) and laptops with wireless (WiFi) connections. Such devices are capable of combining the characteristics of the mobile telephone with still image capture, video playback, Internet access, portal access to subscriber services, email functionality and the features of handheld games consoles.
15. The key feature that appears to distinguish new devices from existing platforms is that they are highly mobile or easily transportable while delivering the content and features that end-users have come to expect in the fixed environment. Often these devices are not stand-alone, but are designed to link with the software on a personal computer (PC) to provide the end-user with maximum mobility.
16. It is also understood that these devices are embedded with features that will enhance existing services, such as chatroom and dating services, or enable the development of new services. Such services are likely to be aimed at specific age cohorts or people with similar interests or may be aimed exclusively at an adult market and contain content unsuitable for children. While similar services may be available online via fixed devices, the added element of mobility combined with enhanced features may add a new dimension to existing services and increase the possible safety risks associated with such services.

³⁰⁸ On 25 June 2004, the Minister for Justice and Customs and the Minister for Communications, Information Technology and the Arts jointly announced the introduction to Parliament new and updated telecommunications offences under the Crimes Legislation Amendment (Telecommunications Offence and Other Measures) Bill 2004. These offences would update and broaden those under the *Crimes Act 1914* and transfer them to the Criminal Code.

Comments are invited on the nature of new and emerging communications devices becoming available in Australia and in particular, what distinguishes these devices from existing technologies in the fixed environment.

2. Report on the type of audiovisual services and related features that are available or are being developed for mobile devices and platforms in Australia and overseas.

17. Mobile carriers in Australia and internationally have invested significantly in 3G network infrastructure and are focussed on growing their customer-base in order to make that investment worthwhile. For these platforms, content appears to be an important driver of take-up and, as a result, mobile carriers are increasingly partnering with content providers to develop new and innovative content. New text-based services are also being developed for second generation mobile phones through both premium rate SMS and unstructured supplementary service data (USSD) technology.
18. Such content may not be exclusive to mobile devices and could include content reconfigured or re-purposed from websites, newspapers, radio and television. This content would include interactive and downloadable gaming, horoscopes, news, weather, sports results and other information.
19. Much of this content would be prepared for a general audience and be suitable for a wide age range. However, mobile communications devices may also offer access to content that normally would be restricted to adults. This could include sexual content, violent content on games and legal, interactive gambling content.
20. The provision of adult audiovisual services has proved internationally to be successful in increasing mobile carriers' revenues. Some research indicates that sexual content over mobile devices will generate some \$1.5 billion in revenues in Western Europe next year³⁰⁹. In Australia, one mobile telecommunications provider is providing such content under contractual arrangement with *Playboy*, including both static images and streamed audiovisual content.
21. Other providers have indicated that they may also provide adult content through their premium rate number services (SMS and MMS). Premium rate services enable parties other than the mobile carrier to offer audiovisual content under circumstances where the carrier arranges for payment for delivery of the content. Such content may include ringtones or phone 'wallpapers' or other repurposed audiovisual content as canvassed above. Some of this content may involve a degree of interaction, through chat services and interactive adult services, including services used for sexual gratification.
22. Some features of mobile services are also of interest to the review because of the way they can be packaged with audiovisual content. In the future, it is expected that features will include audio streaming, precise location determination and advanced browsers³¹⁰. For example, it is expected that online gaming will take advantage of such

³⁰⁹ Jennifer L. Schenker, "In Europe, Cellphone Profits Go Up as Clothes Come Off", *International Herald Tribune*, <http://www.nytimes.com/2004/05/04/technology/techspecial/04SHEN.html>

³¹⁰ Greg Palmer, Hutchison Telecommunications, "Third Generation Mobile Reality", *Telecommunications Journal of Australia*, Spring 2003, Vol. 53, No. 3, p.43.

location-based features and that live, multi-player game services using mobile communications devices will be increasingly popular, especially in the youth market³¹¹.

23. Internationally, there is community concern that some of these features – like location determination or video calling features on mobile devices – will lead to inappropriate contact, especially with children. For example, during the development of the *UK code of practice for the self-regulation of new forms of content on mobiles*³¹², some parties expressed concern about the use of location determination in conjunction with chat services and game products and the availability of such services to minors. In Japan, attempts are being made to regulate ‘dating sites’ in response to the sharp rise in crime associated with such sites involving inappropriate contact with children³¹³.
24. Developments in this area, including those described above, suggest that content providers are seeking to make audiovisual content more interactive thus providing enhanced user experience. These developments may require a different regulatory approach, possibly involving a reassessment of the service provider’s role in relation to end-user protection.

Comments are sought on the types of audiovisual services and related features that are available or are being developed for mobile devices and platforms in Australia and overseas.

In particular, the review is interested in the types of services and features aimed at the adult market and/or services that comprise a geo-locational element, such as gaming, that may pose heightened safety risks, especially to children.

25. New mobile communications devices and services have the potential to benefit both individual consumers and the telecommunications sector. In particular, greater competition in the mobile telephony market will benefit consumers as well as providing broader economic benefits. It will be important that any intervention by the Government in relation to services delivered to mobile communications devices does not unduly inhibit the growth of the sector nor the commercial benefits to industry. In seeking to avoid such an outcome the terms of reference require the review to:

3. Report on relevant technical features, marketable characteristics and commercial drivers for take-up of such services and features including but not limited to:

(a) their means of delivery;

26. Under current arrangements, the means for delivering content has a role in determining the regulatory framework that applies to that content.

³¹¹ See http://www.thinkers.sa.gov.au/images/press_BT_3G_First.pdf which details a game premiered at the Adelaide Fringe Festival 2004. The game took place simultaneously on the streets of Adelaide and online and made use of the handset’s location based features to track other players.

³¹² See <http://www.t-mobilepressoffice.co.uk/company/content-code.pdf>

³¹³ *Children, Mobile Phones and the Internet: the Mobile Internet and Children*, Proceedings of the Experts’ Meeting in Tokyo, Japan, 6-7 March 2003, ‘Dating sites and the Japanese Experience’.

27. For example, under Schedule 5 to the BSA, Internet content is defined as:
- “...information that:
- (a) is kept on a data storage device; and
- (b) is accessed, or is available for access, using an *Internet carriage service*.”³¹⁴
28. Similarly, under Telecommunications Regulations, premium services are defined by their means of delivery³¹⁵.
29. The review therefore seeks information about the way existing and future services are, or will be, delivered. In addition to understanding the technical means by which different types of audiovisual services are supplied, the review seeks to understand the extent to which those technical methods are common across carriage service providers.
30. More generally, the review seeks information on current and likely future developments in technology that will allow or facilitate the delivery of new services on communications devices with multi-media capability. Like content, technical developments will also play a role in take up, for example through enhanced image quality and resolution or by expanding the variety of features available. Examples of areas of interest include developments in:
- data rates and screen/picture resolution for still images and motion video;
 - end-user interactivity (eg. the ability to manipulate images);
 - WiFi services;
 - audio and video streaming capabilities;
 - geo-location technologies; and/or
 - still and streamed image capture capacities.

Information is sought on the technical means for delivery of content to mobile communications devices. Specifically, comments are sought on whether there is a common delivery platform for audiovisual services and whether these services are technically distinguishable from Internet content accessed through fixed delivery platforms.

More generally, comments are sought on the range of technologies used to deliver audiovisual and other content and the technical features that are available, or will soon be available, on new mobile communications devices.

(b) commercial arrangements established for their supply;

31. A factor to be considered in assessing the most appropriate policy and regulatory arrangements for these types of services is the nature of the commercial arrangements, including the extent or level of control over the content by the different parties to that commercial arrangement.
32. A variety of commercial relationships are expected to exist between carriage service providers (CSPs) and content providers. In the case of premium mobile services, CSPs may choose to prepare their own content. More commonly, however, content providers prepare content which is branded and sold by the CSP. Alternatively, the CSP may

³¹⁴ See clause 3 to Schedule 5 of the BSA. Emphasis added.

³¹⁵ See Footnote 1.

enter into an arrangement where the content providers market their own branded content but with billing services provided by the CSP. CSPs may also provide access to content without billing services which is the model that usually applies to general Internet access.

33. In the case of mobile telephones and similar devices, consideration will be given to the commercial arrangements, including revenue sharing arrangements, between the CSPs and content service providers. International experience indicates that revenue sharing arrangements are skewed towards the content providers with a 60 per cent to 40 per cent split between the content provider and mobile operator under the current European premium SMS model, with an 84 to 16 per cent split under some arrangements³¹⁶.
34. Generally, it is anticipated that, where CSPs provide billing services, they will have a contract with the content provider about the type of content to be provided including thresholds on the upper level of the classification of any content offered. There may also be commercial penalties and/or rectification requirements where inappropriate content is provided. Where CSPs do no more than facilitate access to content, there may be no contractual relationship in terms of the type of content to be provided.
35. The *UK code of practice for self-regulation of new forms of content on mobiles* released on 19 January 2004 places increased requirements on CSPs for the management of 'commercial content' in comparison to Internet content. In this context 'commercial content' relates to content where the CSP derives a direct commercial benefit from its provision to its customers.
36. It may also be useful to understand the commercial relationships between CSPs and vendors of mobile devices.

Comments are sought on the commercial relationships involved in the marketing and supply of content services that are, or will be, delivered via mobile devices.

Comments are sought on the ability of different parties to the supply chain (eg. CSPs, content providers) to manage/control the content delivered to subscribers.

(c) their importance in contributing to commercial viability of platform investment;

37. High value-add services can play an important part in the initial investment decision and early development of new products, especially when consumer take-up is low and the cost of the product relatively high. A product may be targeted at niche markets, or less price sensitive consumers, with mainstream consumers being targeted once manufacturing volumes or service level take-up allow for a lower price and higher volume strategy.
38. The review needs to understand the extent to which devices (eg. handsets), services (eg. content) and technical features are integrated into a service provider's brand. For example, in the UK, carrier handsets that carry the Vodafone Live! brand are tightly integrated with the content delivered on that service. This is also the case in other countries such as Japan and more recently Italy, where all aspects of the service are

³¹⁶ Julian Bright, "Seeing beyond SMS", *Net Generation Mobile*, 12 March 2004, pp 6-7.

integrated and the brand presented as a package – from the handset to the content delivered.

39. When combined with quality content for which there is an established market, new features present an opportunity for increased revenue. For example, it is estimated that picture messaging services of soccer games delivered via MMS in the UK will bring in revenues greater than £20 million per annum (approx. AUS\$53 million). The potential revenues for downloading music are even greater. There is also a clear upselling opportunity, to move fans from information, to interaction and browsing on a WAP website, to downloading a wallpaper of a particular picture³¹⁷.
40. Further, the review will seek to understand the role of different types of technical features and other marketable characteristics in the business models, competitive position and ongoing commercial viability of content providers and service providers.

Comments are sought on the commercial role of particular services and features and their importance in contributing to the commercial viability of platform investment in Australia.

(d) the commercial availability and performance of filtering technologies for mobile devices.

41. The ability and possible future ability of consumers to manage their own experience and that of their children, independently from the service providers, will also be considered by the review. Specifically, the commercial availability and performance of filtering technologies and the business models associated with developing and marketing content access controls and monitoring capabilities are also of interest.
42. In this context, the Government seeks to understand whether access restrictions to particular features – for example on geo-locational features in the interests of child safety – are possible and how such restrictions may affect platform investment and network performance.
43. UK mobile telephone CSPs are currently examining the technical options for offering filtered services on mobile telephones including server-level filtering as part of a self regulatory approach³¹⁸. Australian CSPs and content providers have expressed preparedness to investigate alternative access prevention measures such as opt-in requirements for certain services and/or pin code provisions.

³¹⁷ See:

<http://www.sportandtechnology.com/print.php?pageId=0168&PHPSESSID=9a38da12f31c2b70effbab1c59d93ebc>.

³¹⁸ The UK Code distinguishes ‘commercial content’ from general Internet content. The former is content either supplied by the carriage service provider or supplied by a content provider with a contractual arrangement with a carriage service provider. The Code establishes a scheme whereby ‘commercial content’ is classified according to its suitability to minors. Content deemed unsuitable to children will be restricted to those customers that have been verified as 18 years of age or over. The Code operates on the premise that, unlike ‘commercial content’, access to content offered over the Internet is unable to be regulated by mobile network operators. In this instance, operators are reliant on community awareness and the projected availability of filtering technologies as an appropriate means of protecting minors from offensive material.

Comments are sought on the advantages and disadvantages of different types of access control technology over such devices; and whether such controls could feasibly apply to content or to particular features.

Particular comment is sought on the availability of filtering technologies either at the server level or customer device level and the impacts of such devices on network performance.

4. Report on the extent to which existing regulatory approaches apply to the different new and emerging audiovisual services and features

44. The review seeks submissions on the appropriate measures that could apply to the full range of new and emerging services. In particular, the review is required to understand which services are subject to existing arrangements, which services will not be covered by existing arrangements (i.e. a 'gap-analysis'), and whether there are services that could be subject to more than one set of arrangements.
45. There appear to be four broad existing regulatory frameworks which could apply to new and emerging audiovisual services, including:
- Schedule 5 to the BSA, which deals with access to Internet content, provides a complaints system operated by the Australian Broadcasting Authority (ABA) and the obligations that apply to industry Internet Service Providers (ISPs) and Internet Content Hosts (ICHS) in relation to such content. This regime addresses content stored and generally available on the Internet. Internet content does not include information transmitted in the form of a broadcasting service;
 - restrictions placed on telephone sex services via the *Telecommunications (Consumer Protection and Service Standards) Act 1999* which places restrictions on a genre of services, intended for sexual gratification. This regime addresses voice services which are interactive, point to point, where the content is not stored;
 - interim measures which will be imposed by the ACA via the *Telecommunications Regulations 2001* which restrict access to premium mobile services. These regulations address stored content on proprietary network services, including content classified MA and above by the Classification Board, and MMS and SMS services which may include both stored and ephemeral content; and
 - the licence conditions established under the BSA for categories of broadcasting services. It appears that some service providers are of the view that their mobile content service is appropriately a subscription narrowcasting service as defined by the ABA. This would mean that they would be subject to more flexible class licensing arrangements.
46. In considering the appropriateness of existing arrangements, there are specific matters the review will address, including:
- (a) whether the content of the service is of a type that is suitable for categorisation under the national classification system established under the Classification Act.**

47. Content regulation in Australia relies on the national classification system established under the Classification Act. For example, the Online Content Scheme relies on the national classification system to determine prohibited content (content rated X or RC) or content that requires access restrictions (content that is rated R). As noted elsewhere, the Minister has announced interim measures that will apply to premium rate mobile services pending the outcome of this review. These measures will require mobile telecommunications carriers that offer premium rate and proprietary network services to restrict access to certain types of audiovisual content rated MA and above by the Classification Board.
48. The review will consider and report on whether it is possible, or practical, to categorise ephemeral (i.e. not stored) audiovisual content offered on mobile communications devices under the national classification system. For example, content that is streamed live to a mobile communications handset may not be easily classifiable (for example content available via ‘webcams’), and it may not be desirable or appropriate to require a service provider to classify content delivered over its service³¹⁹.
49. The review also seeks to address the question as to whether the national classification system can be applied to unscripted services and ‘on demand’ content. Telephone sex services are an example of such a service. If such services were to be delivered in a text-based manner it is likely that they would not easily be addressed by a regime based on the classification of content. Another example is the increasingly popular ‘on demand’ mobile picture messaging services. A service known as New Media Stills Production was successfully trialed in the UK and allowed fans to access sports photography (of a soccer game in play, for example) as an MMS picture or via a WAP Push³²⁰. It is not clear whether such content could, or should, be classified.

(b) whether the content of various service types falls within the definition of Internet content under Schedule 5 of the BSA or any other regulatory framework

50. Proprietary network services appear to use Internet protocols to deliver content to a mobile device, and can only be accessed by subscribers to a particular carriage service. It is understood that this content is stored on servers which also store content generally available on the Internet. Proprietary network services may also ‘mirror’ content that is generally available on the Internet.
51. Whether Schedule 5 applies to this content delivered via proprietary network services appears to turn on whether the carriage service used to deliver it can be described as an ‘Internet carriage service’ as defined in Schedule 5 of the BSA. It could be argued, however, that premium rate services (MMS and SMS) are clearly outside the coverage of Schedule 5.
52. It also appears possible that essentially the same content could be delivered over more than one platform. In this circumstance, it may be that such content is regulated

³¹⁹ With reference to the UK Code, mobile operators appoint an independent classification body to determine criteria for adult content (consistent with other media). The classification body also considers complaints about misclassified content and the body’s determinations are enforced through mobile operators’ contracts with content providers. Under the Code, there are no provisions for penalties for carriage services providers in relation to the delivery of inappropriate content via their service.

³²⁰ See footnote 16.

differently according to the mode of delivery. Views are sought on the likelihood of this scenario and whether different regulation would be an appropriate outcome.

Comments are sought on the application of existing regulatory arrangements to new services, including on whether the content of new services is suitable for categorisation under the national classification system established under the Classification Act and whether the content of these services falls within the definition of Internet Content and other regulatory arrangements.

5. Consider:

(a) what, if any, measures are necessary (eg. regulation, cooperative arrangements, public awareness and end-user empowerment initiatives) in order that the supply and accessibility of audiovisual services are managed;

53. Terms of reference one to four seek to understand the features of new devices, the types of services and technical and commercial relationships established for their supply and the coverage of existing regulatory and non-regulatory measures of new device services and features. Taking these issues into account, the review also seeks views on whether additional or alternative measures are required, whether amendments to the current regulatory framework would improve consumer protections or consumer services and what would be the most appropriate framework of measures.
54. The review provides the opportunity to consider the benefits of alternative regulatory approaches ranging from industry self-regulation to direct government intervention or a combination of different regulatory approaches. In considering these approaches, the means for appropriate complaints handling procedures will also be canvassed. If the option of direct regulation is considered, this will be balanced against any potential impacts on market development.
55. Schedule 5 to the BSA imposes requirements on ISPs and ICHs which recognise that they will not always be aware, or have control, of the content being provided over their service. However, in the case of the content services that are the subject of this review, there is frequently a contractual relationship between the content provider and the carriage service provider, including for billing of the user for the content services. In the case where there is the capacity for much greater control of the content delivered (including by the carriage service provider), the question arises whether Schedule 5 of the BSA provides the most appropriate model for regulation.
56. In addition to regulatory measures, user empowerment through information and awareness programs may also be important. This is a significant feature of the Online Content Scheme³²¹. Additional measures may be appropriate to ensure consumers are aware of the particular issues associated with the supply and accessibility of new audiovisual services via mobile communications devices.
57. Further, if the content is not easily classifiable under the national classification system established under the Classification Act, the review seeks to identify what types of categorisation can be applied to new services, including, for example, using the 'genre' approach applied to telephone sex services, or whether entirely new measures are required.

³²¹ Refer subclause 1(3) of Schedule 5 to the BSA.

(b) whether there are additional measures that carriage service providers, content service providers and content hosts might take to address contact and child safety issues arising from contact type services (eg. chat).

58. Consideration may need to be given to the implications of certain services already available on PCs and similar devices being offered on mobile devices. For example, unsupervised chat room and dating services might give rise to heightened risks for certain categories of users when delivered in a mobile environment, where adult supervision may not be as practicable as in the fixed environment. Consideration may also need to be given to the provision of services which are specific to mobile devices, for example geo-locational capabilities.
59. As discussed, technical features such as geo-locational capabilities may raise concerns in relation to contact issues and it may be that further measures are required. The role of content and carriage service providers in awareness raising initiatives will also be considered in this context. Examples of such measures include self-regulation which may include developing processes to limit risk through increased cooperation with law enforcement agencies and increased public education.
60. Further, the review will also examine the responsibilities of communications service providers that offer email and other messaging type services that facilitate contact between particular groups based either on shared demography or interests. For example, the responsibilities of service providers in relation to chatroom and other contact facilitating services may be considered. This may include real time oversight or moderation of the content of such services.

Submissions are sought on the nature of potential regulatory approaches that could apply to services delivered to mobile communications devices, including direct regulation, co-regulation and/or self-regulation and the benefits and disbenefits of each. Comments are also sought on how complaints could be handled under each of these regulatory approaches.

Comments are sought on what additional or alternative measures may be necessary (eg. regulation, cooperative arrangements, public awareness and end-user empowerment initiatives) to manage the delivery of new services.

Comments are sought on the roles and responsibilities of communications service providers in advising clients of the potential risks associated with certain services that facilitate online contact through multi-person forums (such as chat rooms) and or other actions which service providers could or should provide.

61. As noted in the Introduction, the terms of reference require the review to have regard to a number of matters.

6. In conducting the review, regard should be had to:

- (a) the interaction of existing and proposed regulation with provisions under Commonwealth and State/Territory criminal laws aimed at child protection and criminal activity using communications devices; and**
- (b) the implications of any proposed measures for the investment in and the commercial development of new communications platforms; and**
- (c) the desirability of regulatory consistency across different technological platforms; and**
- (d) international developments, where applicable.**

While these considerations have informed discussion under each of the previous terms of reference, submitters are welcome to make general comments on their importance.

SUBMISSIONS

62. Submissions are invited from interested parties on matters covered in this paper and any other issues submitters consider relevant to the review. Submissions should be provided by **Friday 3 September 2004** and should be addressed to:

Manager
Mobile Content Review
Broadcasting Division
Department of Communications, Information Technology and the Arts
GPO Box 2154
CANBERRA ACT 2601

Submissions should also be provided electronically and emailed to mobilecontentreview@dcita.gov.au

Submissions will be made public unless otherwise specified. If a submission is marked confidential, a version that may be publicly released should also be provided. A report will be provided to the Australian Government.

REVIEW OF THE REGULATION OF CONTENT DELIVERED OVER CONVERGENT DEVICES

Background

Content regulation in Australia is designed amongst other things to protect members of the public, especially children, from exposure to illegal and highly offensive content. To this end, there are a number of legislative frameworks that regulate the manner in which content is delivered:

- the *Classification (Publications, Films and Computer Games) Act 1995*, that establishes the classification system for film (including videos and DVDs), computer games and certain publications;
- the *Broadcasting Services Act 1992* (BSA), that regulates broadcasting and online content;
- the *Telecommunications (Consumer Protection and Service Standards) Act 1999* that regulates access to premium rate telephone sex services; and
- the *Telecommunications Act 1997* that includes broad powers to make service provider determinations to regulate access to premium rate services.

A number of convergent devices, including 2.5G and 3G mobile phones, are becoming available which are capable of receiving and delivering audio-visual services. These include text services and related features such as location tracking services and closed network content services (so called 'walled-gardens'). The developments raise a range of potential issues for government including:

- the nature of the content services being offered over such devices;
- the application of existing regulatory frameworks; and
- whether, given the nature of the new services, existing approaches are adequate to restrict access to unsuitable content and address issues of child safety.

It is anticipated that the Review will be informed by consultation including submissions from industry and other stakeholders. The Review may also be informed by a consultancy to provide advice on new and emerging services.

TERMS OF REFERENCE

The Review will:

1. Identify new and emerging communications devices and platforms, capable of receiving and delivering audio-visual services (including text), and related features.
2. Report on the types of audiovisual services, and related features, that are available or are being developed for mobile devices and platforms in Australia and overseas.

3. Report on relevant technical features, marketable characteristics and commercial drivers for take-up of such services and features including, but not limited to:
 - (a) their means of delivery;
 - (b) commercial arrangements established for their supply;
 - (c) their importance in contributing to the commercial viability of platform investment; and
 - (d) the commercial availability and performance of filtering technologies for mobile devices.

4. Report on the extent to which existing regulatory approaches apply to the different new and emerging audiovisual services and features including:
 - (a) whether the content of the service is of a type that is suitable for categorisation under the National Classification Code; and
 - (b) whether the content of various service types falls within the definition of Internet Content under Schedule 5 to the BSA or any other regulatory framework.

5. Consider:
 - (a) what, if any, measures are necessary (eg. regulation, cooperative arrangements, public awareness and end-user empowerment initiatives) in order that the supply and accessibility of audiovisual services are managed; and
 - (b) whether there are additional measures that carriage service providers, content service providers and content hosts might take to address contact and child safety issues arising from contact type services (eg. chat).

6. In conducting the review, regard should be had to:
 - (e) the interaction of existing and proposed regulation with provisions under Commonwealth and State criminal laws aimed at child protection and criminal activity using communications devices;
 - (f) the implications of any proposed measures for the investment in and the commercial development of new communications platforms; and
 - (g) the desirability of regulatory consistency across different technological platforms; and
 - (h) international developments, where applicable.

ATTACHMENT B LIST OF SUBMISSIONS

- Australasian Performing Rights Association and Australasian Mechanical Copyright Owners Society
- Australian Broadcasting Authority and Australian Communications Authority
- Australian Direct Marketing Association
- Australian Family Association (WA Branch)
- Australian Film Commission
- Broadcast Australia
- Free TV Australia
- Mr Joseph Holloway
- Hutchison Telecoms
- Media Entertainment and Arts Alliance
- NetAlert
- Office of Film and Literature Classification
- Optus
- SETEL
- Telstra (Commercial-in-Confidence)
- Virgin Mobile Australia
- Vodafone
- Ms Josephine Wardlow-Evans
- Young Media Australia

ATTACHMENT C LIST OF ORGANISATIONS CONSULTED

- 5th Finger
- Australian Subscription Television and Radio Association
- BlueSkyFrog/Legion Interactive
- Ericsson Australia
- Fairfax Digital
- Hutchison Telecoms
- Independent Committee for the Supervision of Standards of Telephone Information Services
- Informatel
- Internet Industry Association
- Jumbuck
- Nortel Networks
- Optus
- Telstra
- Virgin Mobile
- Vodafone Australia
- Vodafone Global
- Vodafone Ireland