AMTA

Australian
Mobile Telecommunications
Association

The Allen Consulting Group

Australian Mobile Telecommunications Industry

Economic Significance

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Report to the Australian Mobile Telecommunications Association

The Allen Consulting Group

The Allen Consulting Group Pty Ltd

ACN 007 061 930

Melbourne

4th Floor, 128 Exhibition St

Melbourne VIC 3000

Telephone: (61-3) 9654 3800

Facsimile: (61-3) 9654 6363

Sydney

Level 12, 210 George St

Sydney NSW 2000

Telephone: (61-2) 9247 2466

Facsimile: (61-2) 9247 2455

Canberra

Level 12, 15 London Circuit

Canberra ACT 2600

GPO Box 418, Canberra ACT 2601

Telephone: (61-2) 6230 0185

Facsimile: (61-2) 6230 0149

Perth

Level 21, 44 St George's Tce

Perth WA 6000

Telephone: (61-8) 9221 9911

Facsimile: (61-8) 9221 9922

Brisbane

Level 11, 77 Eagle St

Brisbane QLD 4000

PO Box 7034, Riverside Centre, Brisbane QLD 4001

Telephone: (61-7) 3221 7266

Facsimile: (61-7) 3221 7255

Online

Email: info@allenconsult.com.au

Website: www.allenconsult.com.au

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Executive summary

Australia's mobile telecommunications industry has been a strong performer over the last ten years, and its ongoing innovation provides a platform for continued success. In 2004-05, the Australian mobile telecommunications industry had more than 16 million subscribers, representing approximately 81 per cent of the Australian population. This mobile penetration rate is forecasted to exceed 94 per cent in 2005-06. Mobile telecommunications have clearly become a part of everyday life for individuals, business and the community.

To better understand the economic significance of the mobile telecommunications industry in Australia, the Australian Mobile Telecommunications Association (AMTA) engaged The Allen Consulting Group to undertake research in this area. This report brings together detailed information on the participants in the industry and the industry's growth, and presents examples of how mobile phones have enhanced the way people do business and manage their daily lives. It also presents measures of the economic significance of mobile telecommunications to the telecommunications industry and the economy at large.

The mobile telecommunications industry

The mobile telecommunications industry is made up of three major sectors, plus an additional three small sectors that are growing in importance.

The *hardware sector* is responsible for building and maintaining the network infrastructure required for mobile telephony, as well as providing end-user hardware such as handsets. The hardware sector includes several large global firms and many smaller firms, most of which provide end-user equipment.

Carriage service providers (CSPs) supply telecommunication services to the public using carrier network infrastructure. There are currently twenty-seven CSPs operating in Australia. This includes four mobile network carriers — Telstra, Optus, Vodafone and Hutchison — who own and operate six mobile networks, in addition to a number of resellers and mobile virtual network operators (MVNOs). The CSP sector is the largest individual sector in the mobile telecommunications industry.

Retailers are the third major sector of the mobile telecommunications industry. They offer mobile services to end users on behalf of the CSPs. Customers can purchase mobile telecommunications hardware and services from different kinds of retail outlets, including speciality shops that are branded by a CSP and outlets that sell mobile telecommunications as part of a broad range of products. A recent development in the retailing of mobile telecommunications is the facility for customers to purchase mobile phones and connect to services online.

The relatively new sectors of *content providers*, *content aggregators* and *program developers* are growing in importance. Content providers develop and provide information and entertainment on mobile phones. Content aggregators typically manage multiple content providers and supply services such as sourcing, reporting, formatting for multiple streams, quality control and cross referencing. Program developers design new applications that can create further market opportunity for content providers and aggregators, as well as other program developers.

Economic significance of mobile telecommunications

The mobile telecommunications industry is a high-revenue, high-cost industry that makes a substantial and growing contribution to the wider telecommunications industry and the Australian economy. The following indicators demonstrate this.

- *Industry gross product for the CSP sector in 2004-05 was $6.1 billion, up from $5.3 billion in the previous year.*[1]
  - Industry gross product (IGP) is a measure of the economic contribution of a specific industry to the economy or value added.
  - The current contribution of the mobile telecommunications sector to the economy is larger than the free to air television services industry and also larger than the newspaper printing and publishing industry. Furthermore, it is almost three times the contribution of the automotive, vehicle and component manufacturing sector.
- *The industry contributes substantially to government revenues through industry-specific charges and levies, as well as standard Commonwealth and state industry taxes.*
  - It is estimated that ongoing industry-specific payments made by the mobile telecommunications industry to government are in the order of two per cent of revenue per year, or $175.6 million in 2004-05.
  - The industry contributes to its effective operation through compulsory and voluntary payments to support various industry associations and self-regulatory schemes, for example the National Relay Service, AMTA and the Telecommunications Industry Ombudsman.
- *Employment in the mobile telecommunications industry is growing.*
  - Approximately 33 600 people worked in the industry (on a full-time, part-time or casual basis) in 2004-05. Over the period 1999-00 to 2004-05, employment in the mobile telecommunications industry increased by 46 per cent, compared to an increase of roughly 38 per cent in the telecommunications industry as a whole.
  - In 2004-05, the mobile telecommunications industry paid around $1.3 billion in wages.
  - Mobile telecommunications accounted for 30 per cent of total telecommunications employment in 2004-05. By comparison, it accounted for 27 per cent in 1998-99.

[1] This figure is based on statistics on mobile network carriers IGP from IBISWorld publication J7122 *Mobile Telecommunications Carriers in Australia 2004*, and statistics on mobile resellers IGP from IBISWorld publication J7123 *Telecommunications Resellers in Australia 2004*.

- *Capital expenditure by the industry has been substantial.*
  - In 2005, the industry has continued its capital expenditures to support new networks and expansions and upgrades to existing networks. This is in addition to regular operating expenditures.
  - Capital expenditure on new networks since 1997 is estimated at $10 billion.[2] These investments underpin expansions to mobile network coverage that make mobile services available to more people in more places, as well as support the development of innovative services.
- *Revenue in the mobile telecommunications industry is significant.*
  - Mobile telecommunications industry revenue for 2004-05 was $9.9 billion, and estimates suggest that it will be $11.9 billion in 2005-06.[3]
  - In 2004-05, mobile revenue represented 30 per cent of total telecommunications revenue.

Expectations of continuing industry development

The measures of economic significance of the mobile telecommunications industry underscore the strong growth that the industry has experienced in its first ten years. Moreover, they make clear that the industry has evolved substantially over this time. The emerging trends suggest that industry development continues to be driven by competition, innovation and a focus on meeting customer needs.

Subscriber numbers have shown strong growth since the early 1990s. The estimated annual growth rate in mobile subscriber numbers from 2004-05 to 2005-06 was 13.4 per cent. Peaks in subscriber growth appear to be associated with the introduction of new networks, and the full impact on growth rates of the new 3G network, which commenced in 2003, will be observed over the coming years.

Mobile penetration rate is the number of mobile phone services per 100 people. Australia's mobile penetration rate grew from 58 per cent in 2001-02 to 81 per cent in 2004-05, and it is forecasted to exceed 94 per cent in 2005-06.[4] Although it may seem surprising, a penetration rate exceeding 100 per cent has been achieved in a number of countries and research suggests that it will be achieved in Australia by the end of 2008.[5]

Prepaid customers are driving the continued growth in subscriber numbers (see figure ES.1). In 2004-05, 43 per cent of all mobile phone services were prepaid. This group of services is expected to grow to 47 per cent of all mobile services in 2005-06. Prepaid services offer an inexpensive way to enter the mobile market, allowing customers to better manage their mobile phone expenditure. The increasing preference for prepaid services suggests that customers value choice and flexibility.

[2] IBISWorld 2005, *J7122 – Mobile Telecommunications Carriers in Australia*, p. 20..

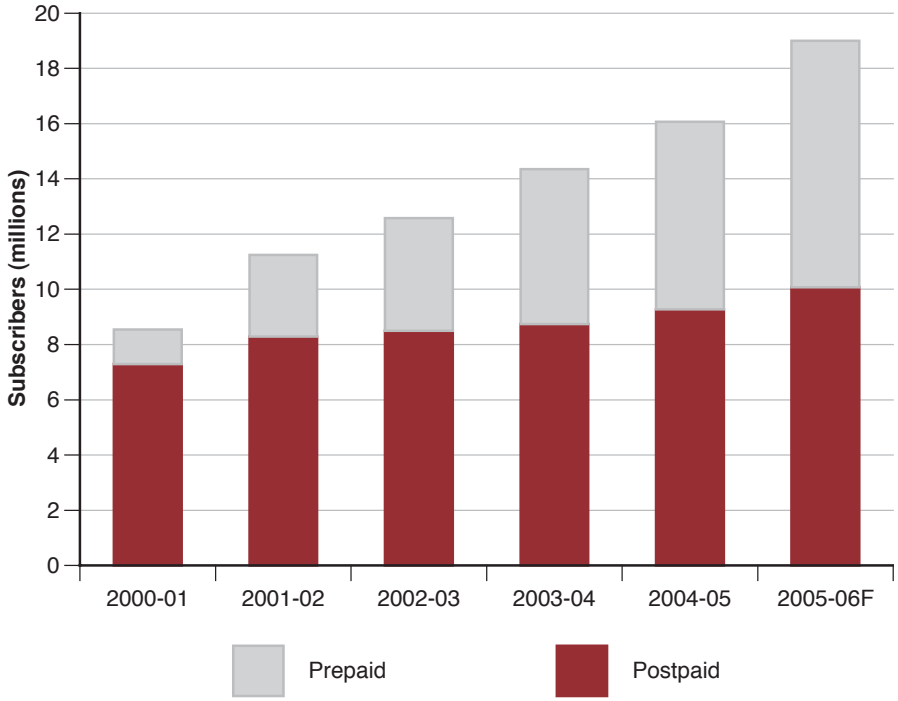
[3] Credit Suisse First Boston 2005, *Australian Telecommunications 2005*, Equity Research, p. 38.

[4] Credit Suisse First Boston 2005, *Australian Telecommunications 2005*, Equity Research, p. 38.

[5] Computer World 2005, *Australia's Mobile Phone Use to Exceed 100% in 3 Years.*

Figure ES.1

PREPAID VERSUS POST-PAID SUBSCRIBERS, 2000-01 TO 2005-06



Note: F indicates forecast values.
Source: Credit Suisse First Boston 2005, *Australian Telecommunications 2005*, Equity Research, p. 38.

Short message service (SMS) is another major source of growth in the mobile telecommunications industry. During 2003-04, almost 5.1 billion SMS messages were sent, reflecting an increase of 28 per cent from the previous year (see figure ES.2).[6] Huge peaks in SMS use are experienced at significant times in the community, such as Christmas, New Year's Day and Valentine's Day. Furthermore, many industry innovations are being developed around the use of SMS.

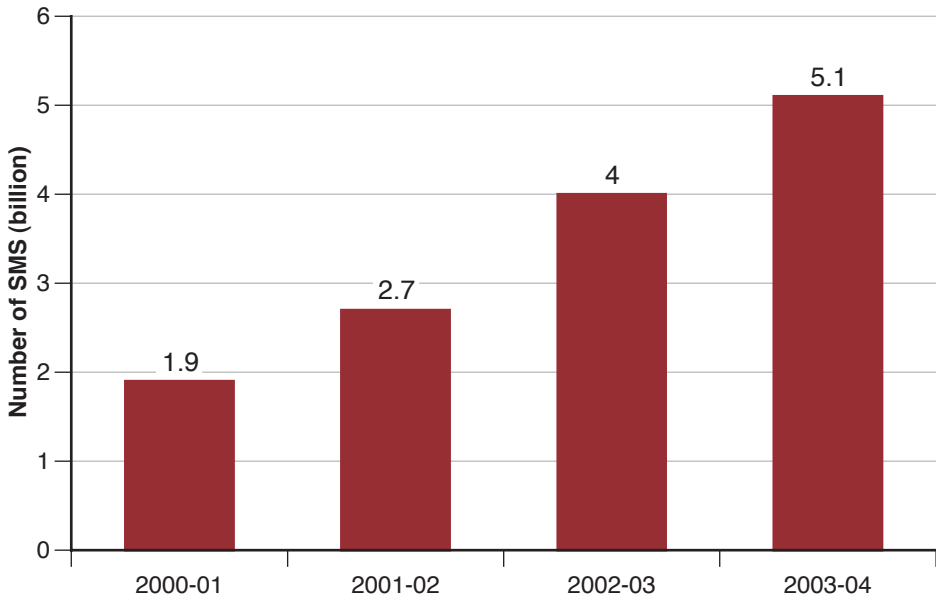
The use of *multimedia message service* (MMS) is increasing in the mobile telecommunications market, with 13.7 million MMS messages sent in 2003-04.[7]

[6] Australian Communications Authority, 2005, *Telecommunications Performance Report 2003-04*, Melbourne, p. 76.

[7] Ibid., p. 77.

Figure ES.2

BILLIONS OF SHORT MESSAGE SERVICES (SMS), 2000-01 TO 2003-04



Source: Australian Communications Authority 2005, *Telecommunications Performance Report 2003-04*, Melbourne, p. 76.

Innovation: the benefits of convergence

The rapid speed in which the mobile telecommunications industry moved from the now obsolete AMPS network to the most recent third generation of mobile phones illustrates the industry's penchant for embracing innovation. In the past few years, the industry has made significant advances in linking mobile phones to other forms of technology, particularly media and information technologies.

Known as convergence, this process blends communications technologies together to facilitate wider, more integrated methods for the distribution of information. Convergence has transformed the mobile phone from a basic voice communication piece to a machine facilitating the interaction of three major sectors: telecommunications, media and information technology.[8]

A key aspect of convergence is that it enables users to access a wide variety of content on their mobile phones. For example, some mobile phones now allow users to:

- have immediate access to news highlights, sport, stock prices, listen to music and news on the radio and watch television broadcasts (media);
- send and receive emails, including synchronisation with business software (information technology); and
- hold video conference calls, send SMS to fixed phone lines and take digital quality photos (telecommunications).

[8] M/Cyclopedia of New Media 2004, *Mobile Phones-Convergence*, http://wiki.media-culture.org.au, accessed 13 July 2005.

Innovations of this type are impacting the way individuals go about their day-to-day activities and the way businesses operate, both helping to improve the quality of life and increase productivity.

Convergence also presents challenges for the industry and its regulators in ensuring that the new models of service delivery meet high standards for responsibility and accountability.

Social contribution

Data on measures such as IGP, employment and payments to government demonstrate the economic contribution of the mobile telecommunications industry to the Australian economy. However, those measures do not capture the many ways in which mobile telephony contributes to improvements in the quality of people's lives and increases in social equity more broadly.

For many people, mobile telecommunications is more than a tool to make voice calls; instead, the extensive coverage, array of services and information available mean that the mobile phone can 'make life mobile'. A significant benefit of mobile telecommunications continues to be the accessibility and freedom for people on the move to maintain contact with other people.

Innovations in the mobile telecommunications industry also have helped to increase social equity by expanding access to disadvantaged groups, encouraging workforce participation and using revenues for community programs. For example, the increased affordability of mobile telephony — particularly through low-cost and capped plans — allows more people to benefit from the connectivity of mobile telecommunications services.

The mobile telecommunications industry also has been a leader in promoting the appropriate disposal of mobile telecommunications products in order to protect the environment. Since 1999, its fully funded recycling program has collected more than 300 tonnes of mobile phone handsets, batteries and accessories for recycling.

Future reports

This is the third report sponsored by AMTA to examine the economic significance of the mobile telecommunications industry. AMTA welcomes comments on the methodology used and the material presented in the report.