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# Chapter 1

## The Australian communications and media industry



## Chapter summary

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The communications and media sectors in Australia provide critical infrastructure and services that underpin the development of the digital economy. The rollout of broadband infrastructure is driving network and service convergence and the development of fixed and wireless broadband networks is providing new service offerings for consumers. The transition to digital television and digital radio is also providing a foundation for the transformation of broadcasting services.

New network rollouts of fixed and wireless broadband networks and the impending National Broadband Network are driving the development of high speed internet services in Australia.

Wireless is also playing an increasingly important role in the provision of broadband access in Australia. There are approximately 287 fixed and mobile wireless broadband providers in Australia (including 54 mobile wireless broadband providers such as mobile network carriers, resellers and mobile virtual network operators) compared with an estimated 225 providers last year.

The number of internet subscribers continued to grow over 2008–09, reaching 8.4 million compared with 7.2 million at June 2008. Broadband subscribers accounted for approximately 87 per cent of all internet subscribers in Australia at June 2009 compared with 78 per cent at June 2008. Wireless broadband subscribers share of the internet market continued to increase, reaching 25 per cent of total internet subscribers at June 2009 compared with 11 per cent at June 2008.

Approximately 2.3 million households subscribed to subscription television broadcasting services as at June 2009 compared with 2.2 million at June 2008.

Media advertising expenditure in Australia increased by 3.7 per cent to \$13.7 billion in 2008. Online advertising grew by 27 per cent to total \$1.7 billion and accounted for 13 per cent of total advertising expenditure, up from 10 per cent in 2007.

Competition, technological convergence and changing consumer behaviours are driving the communications and media industries to adopt strategies to retain customers and diversify revenue sources.

Australian internet service providers (ISPs) are moving away from the single service model by offering a range of bundled voice and content services to customers. The mobile telephone industry is increasingly providing incentives to customers to increase usage of data services with mobile revenues exceeding PSTN revenues for the first time this year. This demonstrates a shift in consumer use and preference. Traditional media companies are seeking to tap into Australia's growing online audience through the development of online marketing and content distribution channels.

**Table 1.1 Key industry statistics**

	2007–08	2008–09
Number of fixed-line telephone service providers	372	391
Number of VoIP service providers	268	287
Number of mobile network carriers	4	3
Number of internet service providers	678	638
Number of carrier licences issued	17	22
Number of geographic numbers allocated	4.5 million	3.13 million
smartnumbers® revenue raised	\$4.6 million	\$3.2 million
Expenditure on media advertising*	\$13.2 billion	\$13.7 billion
Expenditure on online advertising*	\$1.3 billion	\$1.7 billion

\* Relates to 2007 and 2008 calendar period.

## Challenges to traditional communications and media industries

Network and service convergence is presenting new commercial challenges and opportunities for industry operators, with companies adopting a range of strategies to retain customers and to differentiate service offerings from competitors.

What is most evident in industry response strategies is the shift from a single service provider model and the integration of broadband internet access to provide voice and data services to customers and in some cases video services.<sup>1</sup>

Communication service providers in particular are faced with the challenge of determining whether they should move to a value-added model and provide content and applications directly to customers or to provide access to broadband only (a commodity access provider model) allowing customers to utilise the functionality of the entire web.

### Fixed-line service providers

Operators of public switched telephone networks (PSTN) around the world have experienced commercial challenges largely as a result of increasing competition due to market deregulation, the declining cost of technology and continuing technological innovation. These factors in combination have led to declining revenues.

Analysis of the PSTN market in Australia over recent years has shown falls in fixed-line subscriber numbers, revenues and call volumes. This decline can in part be attributed to:

- > competitors investing in alternative infrastructure and networks
- > increased reliance on the use of mobile voice services and associated reduced reliance on the fixed-line for voice services
- > consumers cancelling fixed-line services, relying solely on mobile services for their voice needs
- > increased uptake of Voice over Internet Protocol (VoIP) services as part of bundled broadband service offerings
- > increased use of alternative communications including email, instant messaging, social networking and micro-blogging sites and applications.

Operators have responded by deploying fixed and mobile broadband networks to facilitate the delivery of voice, data and media services. The growing importance of mobile networks is demonstrated by the financial results of Australia's two largest telecommunications carriers. Telstra's 2008–09 financial results showed that for the first time, revenue from mobiles (\$6.88 billion) exceeded revenue from traditional PSTN services (\$6.34 billion).<sup>2</sup> Optus recorded a 21 per cent increase in mobile revenue during the three months to June 2009, with mobile revenue accounting for nearly 61 per cent of total revenue at 30 June 2009.<sup>3</sup>

1 Exchange, vol. 21, no. 86, June 2009.

2 Exchange Daily no: 141, 14 August 2009.

3 SingTel financial results presentation, 13 August 2009.

## Mobile service providers

Mirroring developments in the fixed-line voice market, the mobile market in Australia has seen declining prices for voice services in recent years.<sup>4</sup> Mobile service providers have responded by offering incentives to customers to increase their use of mobile data services by:

- > reducing the cost or bundling quotas of SMS/MMS<sup>5</sup> messages
- > providing access to paid content and services on handsets (such as inside 'walled gardens')<sup>6</sup>
- > providing broadband internet access to mobile handsets and other customers devices such as laptops and smartphones.

Further challenges are also arising from the emergence of handsets that are pre-loaded with content and application functionality, such as pre-installed mobile VoIP applications or access to music (for example, Nokia's 'Come's with music' handsets). Handset makers have also introduced application stores which enable consumers to directly download the applications of their choice to their handset. Examples of this include Apple's App Store and Nokia's Ovi application store. New generation handsets with larger screens are also making it more practical for users to browse internet sites successfully from their mobile handset or device.

The entrance of non-traditional telecommunications companies into the mobile service market is also an emerging challenge. These companies usually seek to utilise market presence in their traditional sector of operation to offer communication services directly to existing customers. This is typified by the announcement of a major food retailer that it intends to offer pre-paid mobile services to customers through its retail outlets.<sup>7</sup>

## Internet service providers

The ISP sector in Australia provides further evidence of the decline in the single service provider model. With approximately 638 ISPs<sup>8</sup> in Australia, and more than three quarters of Australian households connected to the internet, 90 per cent of these using broadband, the scope for significant revenue growth through the provision of internet access alone is increasingly limited.

With increased competition, the commercial focus of many ISPs has turned to reducing customer churn through service bundling and the provision of incentives to improve customer loyalty.

One of the key strategies now utilised by ISPs to retain customers is to provide bundled communications services which offer discounts to customers for purchasing one or more services in addition to internet access. Figure 1.1 provides an overview of the increasing range of services now provided by Australian ISPs, with service offerings typically encompassing:

- > internet access (including naked DSL)
- > voice services offered via either fixed-line or wireless technology
- > content services, typified by the provision of subscription television or IPTV
- > content filtering /e-security services.

4 The ACMA, *ACMA Communications Report 2007–08, Economic benefits resulting from changes in telecommunications services*.

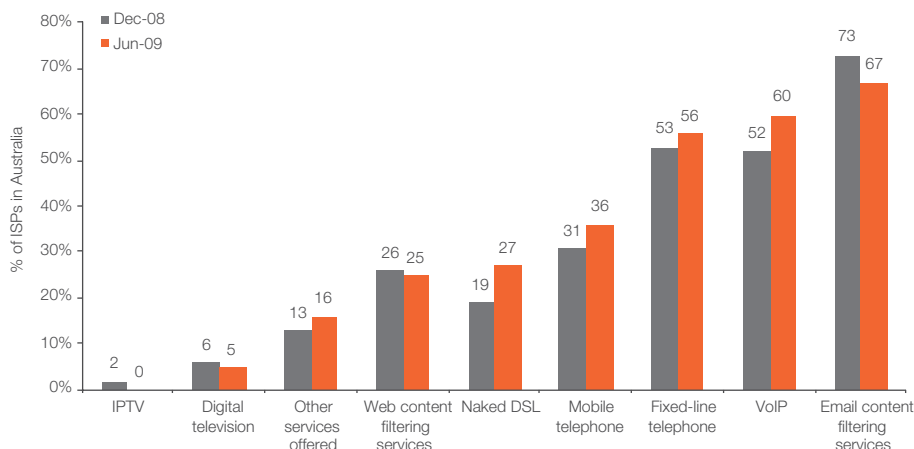
5 SMS: Short Message Service. MMS: Multimedia Messaging Service.

6 A 'Walled Garden' refers to a mobile operator providing web content or information services to the customer's handset which does not involve the customer browsing the internet.

7 *Exchange Daily*, no: 133, 4 August 2009.

8 Market Clarity Database, June 2009.

Figure 1.1: ISP service offerings



Note: Relates to ISPs with more than 1,000 subscribers.  
Source: ABS, 8153.0—Internet Activity, Australia, June 2009.

Sixty per cent of ISPs offer VoIP services to their customers as part of a broadband/VoIP bundle. Other products bundled by ISPs at June 2009 include mobile phone services (36 per cent), home telephone services (56 per cent) and web content filtering (25 per cent).<sup>9</sup>

Recent deployments of infrastructure are enabling ISPs to differentiate their product and service offerings to attract and retain customers. Naked DSL services, which provide customers a broadband service without a monthly line rental charge were provided by 27 per cent of ISPs at June 2009, compared with 19 per cent at December 2008; an eight percentage point increase. These services, which are provided to around 600,000 Australian consumers, are typically bundled with VoIP services thereby providing a low cost fixed-line home telephone service for the customer.

Other ISPs are providing additional incentives to attract and retain customers, such as providing unmetered access to specific online content. For example, there are currently five ISPs providing unmetered access to the ABC iView service.<sup>10</sup>

### Television broadcasters

Over the past year the Australian television industry has moved to provide audiences with more viewing choice through the launch of new digital TV services including services provided under the Freeview brand.<sup>11</sup> While the challenge to broadcasters has traditionally come from viewers channel-surfing, the blurring of boundaries between technologies as a result of convergence has meant that viewers are now able to surf across technology platforms for relevant content.<sup>12</sup>

With increased access to streaming and downloadable video content over broadband services, television broadcasters are competing not only against other television networks, but also a range of video content, web content, information and applications accessible on the internet.

<sup>9</sup> ABS, 8153.0—Internet Activity, Australia, June 2009.

<sup>10</sup> At 29 July 2009.

<sup>11</sup> PriceWaterhouseCoopers, *Outlook: Australian Entertainment & Media, 2008–12*.

<sup>12</sup> PriceWaterhouseCoopers, *Outlook: Australian Entertainment & Media, 2008–12*.

Broadcasters are taking active steps to share in the growth of online audiences—estimated to be in the vicinity of 13 million people in Australia<sup>13</sup>—by using online channels to market popular TV shows and to develop additional revenue sources through online advertising. Examples of this include the Seven Network's partnership with Yahoo and the Nine Network's partnership with Microsoft (creating the ninemsn online properties). The Seven Network is one broadcaster with financial interests in the telecommunication sector, with its acquisition of VoIP provider Engin and wireless broadband provider Unwired.<sup>14</sup>

Australia's commercial television broadcasting licensees are also catering to viewer demand for time-shifted viewing experiences, providing full episodes of content for 'catch-up' viewing online. National broadcasters, the ABC and SBS now provide significant volumes of their broadcast content online, while Foxtel continues to provide access to time shifted television viewing through its Foxtel iQ digital recorder. The Seven Network has also taken an initiative in this area with introduction of the TiVo digital recording device to Australia. The TiVo device allows consumers to record free-to-air television shows, and download movies and other content on demand. The downloading of TV content onto iPods, with some advertising included, is also expected to expand.<sup>15</sup>

### Radio broadcasters

The key challenges to radio broadcasting licensees in Australia come from the availability of online content which is removing the geographic boundaries that previously limited radio listeners to their local stations. With radio stations increasingly providing streaming broadcasts online, Australian consumers can choose from radio stations worldwide. Purely online music streaming services such as *Last.fm* which provide streaming music recommendations based on an individual's listening history and interests, present further challenges as they provide a customised experience to listeners.

Australian radio stations are engaging with the online environment, providing their own broadcasting streams online, as well as podcasts of shows for download by interested listeners. In addition, radio stations are offering additional content on their websites such as news, sports, style and gossip to attract a regular online audience.

The introduction of digital radio in May 2009 has given radio broadcasters the opportunity to provide additional channels, a wider choice of content, and a range of special features to listeners.

### Newspaper publishers

Over the past few years the traditional newspaper industry has seen the migration of readership to the online environment to access news and information. Nielsen reports that *news.com.au* sites for example, attracted a unique monthly audience of around 2.3 million readers in Australia, generating 122 million page views per month.<sup>16</sup> Newspapers continue to build their online capabilities to support their offline broadsheets with high-demand content such as classifieds, entertainment and travel driving the development of online readership.

In the majority of cases, content is made freely available to readers with media organisations seeking to develop new sources of revenue through online advertising. However, some publishers have moved to incorporate a user pays principle into their online business models, requiring readers to pay a fee to access certain 'premium' content while other major media entities have more recently stated their public intention to implement a full user pays model for newspaper and television content made available online.<sup>17</sup> The willingness of Australians to pay for online content previously available at no cost will be a major factor in the success of any user pays strategy.

13 Nielsen Online June quarter 2009.

14 The Seven Network Limited 2008 Annual Report states control of Engin was gained in April 2008. Information on Unwired [www.unwired.com.au/about/background.php](http://www.unwired.com.au/about/background.php)

15 IBISWorld: *Free to Air Television Services in Australia*, March 2009.

16 Nielsen Online, June 2009.

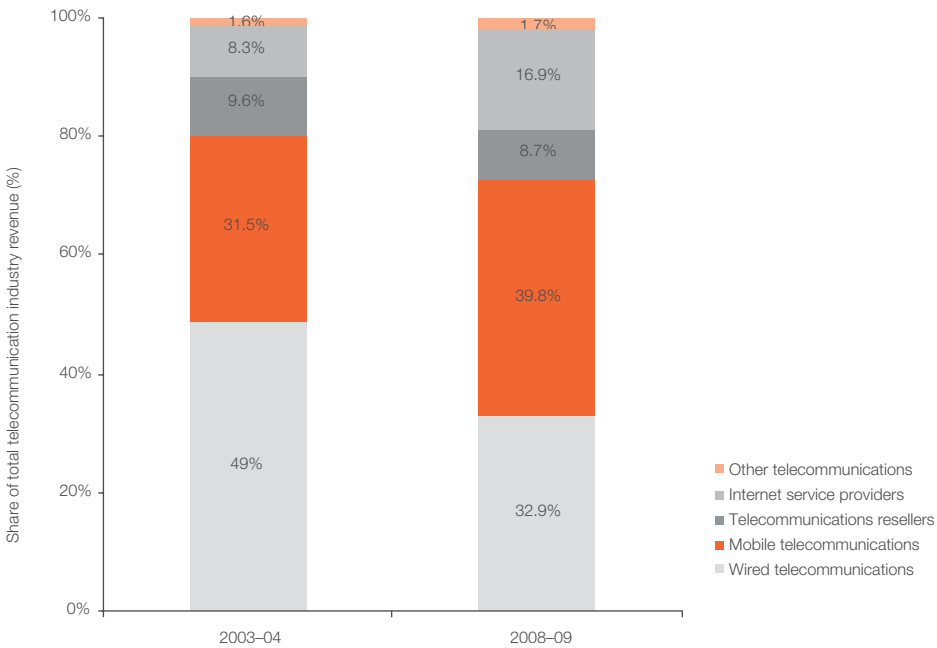
17 [www.ft.com/cms/s/0/b103cb1a-81f9-11de-9c5e-00144feabdc0.html](http://www.ft.com/cms/s/0/b103cb1a-81f9-11de-9c5e-00144feabdc0.html)

# Telecommunications industry revenues

IBISWorld estimates that the telecommunication industry in Australia generated revenue of \$40.6 billion dollars during 2008–09. Figure 1.2 presents data on the estimated change in the share of total telecommunications industry revenue between various telecommunications industry sub-sectors. During 2008–09, the mobile sector was estimated to have accounted for the single largest share of total industry revenue, nearly 40 per cent, compared with nearly 32 per cent in 2003–04. In comparison, the wired (fixed-line) telecommunications sector accounted for nearly 33 per cent of total industry revenue in 2008–09, a decline from 49 per cent in 2003–04. The ISP sector experienced substantial growth over the 2003–04 to 2008–09 periods, accounting for 16.9 per cent of total industry revenue during 2008–09 compared with 8.3 per cent in 2003–04.

Table 1.2 over the page provides a broad level overview of the communication infrastructure and service market in Australia.

**Figure 1.2: Change in the share of total telecommunication industry revenue, 2003–04 to 2008–09 (constant prices)**



Source: IBISWorld Industry Report. Communication Services in Australia, 13 March 2009.

**Table 1.2: Communication network and service providers, June 2009**

<b>Infrastructure</b>	
Number of mobile network carriers	3
ISPs with own DSLAM infrastructure	22
Number of Hybrid Fibre–Coaxial Cable (HFC) network operators	4
<b>Service providers</b>	
Number of fixed-line telephone service providers	391
Voice over Internet Protocol (VoIP) service providers*	287
Internet service providers	638
DSL service providers	529
ADSL2+ service providers	148
Fixed-wireless	233
Mobile-wireless	54
Satellite broadband service providers	47

\* Includes service providers, resellers and systems integrators.

Source: Market Clarity Database for data relating to service providers. Paul Budde for HFC network operators, ISPs with DSLAM infrastructure, the ACMA for mobile network carriers.

## Telecommunication service availability

### Fixed-line voice availability

The universal service obligation (USO) is the obligation placed on universal service providers to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia wherever they reside or carry on business. The USO is supplied using a fixed-line standard telephone service. However, satellite, mobile or wireless local loop services are used when it is impractical to use a fixed-line service.

At June 2009, there were 391 fixed-line telephone service providers operating in Australia compared with 372 at June 2008, with the main growth occurring in the VoIP services industry. Of the total number of voice service providers, 226 were offering fixed-line telephone services and 287 operated in the VoIP market including service providers, resellers and systems integrators.<sup>18</sup>

### Mobile service availability

The number of mobile network carriers in Australia has declined from last year with the merger of Vodafone and '3' Australian operations. In May 2009, the Australian Competition and Consumer Commission (ACCC) decided not to oppose the 50:50 joint venture after concluding that it was unlikely to substantially lessen competition in the relevant markets.<sup>19</sup> The joint venture company is Vodafone Hutchison Australia Pty Limited (VHA). This leaves the Australian mobile market with three network carriers with Telstra holding approximately 41 per cent of the mobile telephony market, Optus approximately 33 per cent of the market and VHA approximately 26 per cent of the market.<sup>20</sup>

18 Market Clarity Database, June 2009.

19 ACCC press release, *ACCC not to oppose proposed merger of Vodafone and Hutchison*, 29 May 2009.

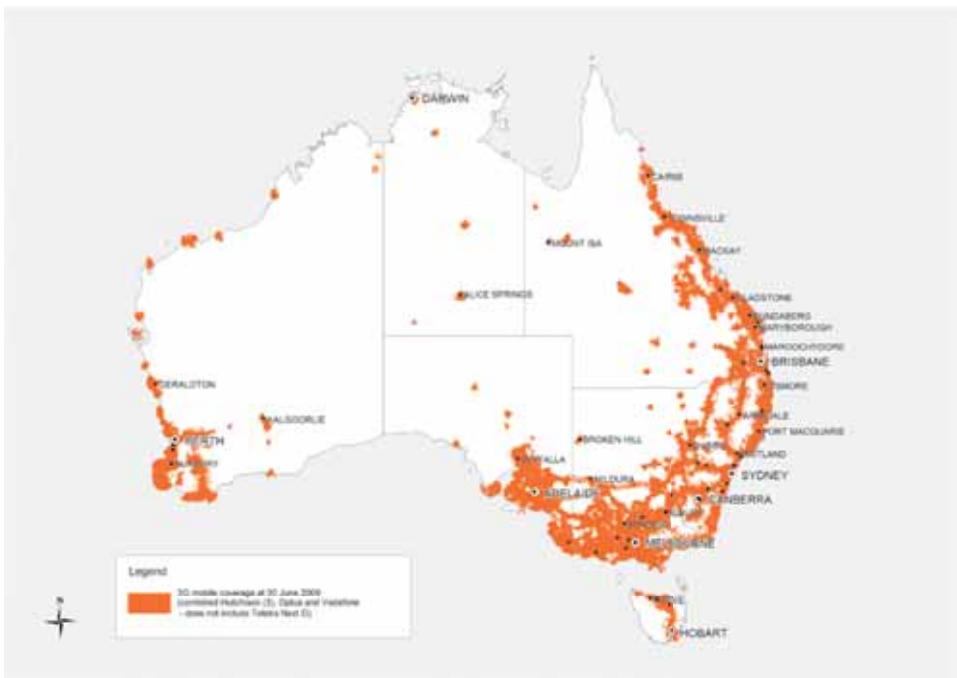
20 ACCC, *Public Competition Assessment, Vodafone Group plc and Hutchison 3G Australia Pty Limited – proposed merger of Australian mobile operations*, 24 June 2009.



The three mobile network carriers operate six carrier networks with each owning and operating a Global Systems for Mobile (GSM) and a Wideband Code Division Multiple Access (W-CDMA or 3G) network. At June 2009, GSM networks provided coverage to 96.22 per cent of the population in Australia and 3G networks, which provide access to both voice and data services, including mobile broadband, provided coverage to 99.06 per cent of the population. Mobile operators continue to upgrade their network coverage. Vodafone reported that it had expanded the coverage of its 3G network to 94 per cent of the Australian population as at 31 August 2009.<sup>21</sup> Optus reported that its 3G mobile network coverage reached 96 per cent of the population by December 2008. Optus has also announced plans to extend its network coverage to 98 per cent of the population by 31 March 2010.<sup>22</sup>

All 3G networks have been upgraded to high-speed downlink packet access (HSDPA) protocol which increases the download speed capabilities of W-CDMA networks. Depending on network configurations, 3G networks in Australia can generally provide download speeds of up to 14.4 Mbit/s and upload speeds of up to 1.9Mbit/s. All mobile operators have also announced plans to upgrade their networks.

Figure 1.3: 3G mobile coverage by Optus and VHA



Source: Optus, VHA.

21 Vodafone media release, *Vodafone extends 3G coverage: bringing choice and value to regional coverage*, 31 August 2009.  
 22 Singtel, *Q4 and Financial Year Results 2008–2009, Management Discussions and Analysis*, March 2009.

Figure 1.4: Telstra NextG™ network



Source: Telstra.

### Government mobile availability programs Satellite Phone Subsidy

The Australian Government announced on 5 March 2009<sup>23</sup> a number of changes to the Satellite Phone Subsidy Scheme, an initiative to help people living or working outside of terrestrial mobile phone coverage to purchase satellite mobile phones. These changes included:

- > additional individual handset subsidies for health and emergency service organisations; up from the previous limit of two
- > a subsidy increase to 85 per cent of handset cost, up from the previous 60 per cent, including the replacement of handsets purchased more than three years ago.

On 5 August 2009, further changes to the Satellite Phone Subsidy Scheme were announced including:

- > All people, health and emergency services organisations outside of handheld mobile coverage are now eligible. Previously, the subsidy was only available outside of mobile coverage enhanced by an external antenna.

- > Removal of red-tape for health and emergency service applications.

### Internet service availability

Depending on their location, Australian consumers have access to a range of internet access technologies including, digital subscriber line (DSL), hybrid fibre coaxial (HFC), wireless broadband, fibre to the kerb (FTTK), satellite and optical fibre. DSL is effectively a layered service added to the existing copper based access network. The HFC is a separate network combining a fibre backbone and high speed coaxial cable distribution to provide a shared capacity between its customers. FTTK networks extend the speed and capacity of fibre to an area closer to the customer (unlike FTTH that serves a larger area) where existing copper can be used to complete the physical bearer.

23 [www.dbcde.gov.au/mobile\\_services/the\\_satellite\\_phone\\_subsidy\\_scheme](http://www.dbcde.gov.au/mobile_services/the_satellite_phone_subsidy_scheme)

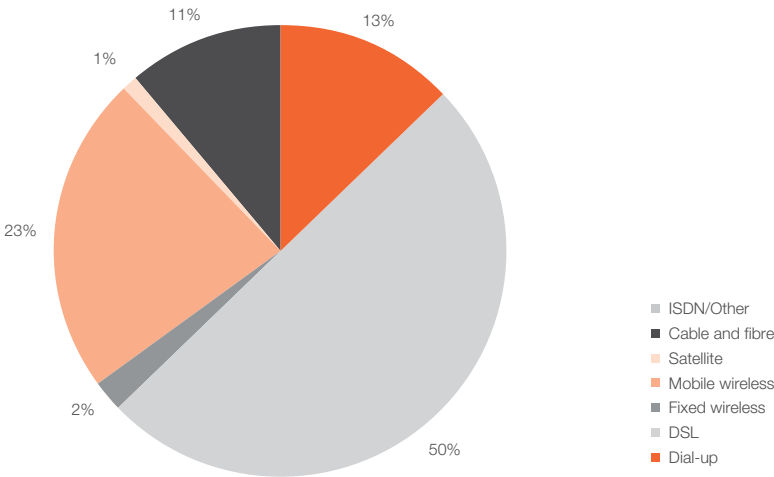
According to the Australian Bureau of Statistics (ABS), there were 8.4 million internet subscribers in Australia at June 2009 compared with 7.2 million at June 2008.<sup>24</sup> Services were provided by approximately 638 internet service providers (ISPs) in operation at June 2009. Of these ISPs, 529 provided DSL services and 148 ADSL2+ services, 233 provided fixed wireless services, 54 provided mobile wireless broadband services, 47 provided satellite service and four provided cable services.<sup>25</sup> The market share of each technology is shown in Figure 1.5.

ABS data shows that DSL is the most common internet connection in Australia with 50 per cent of Australian internet subscribers estimated to be connected to a DSL service at June 2009. DSL is provided via the copper network and is either offered by:

- > the network owner as a wholesale or retail service (71 per cent)
- > other ISPs using unbundled lines (29 per cent of DSL services).

At June 2009, the ACCC reported that there were 4.34 million DSL services in operation. Of these, 71 per cent were provided by Telstra through a retail or wholesale arrangement. The number of retail and wholesale DSL subscribers has continued to fall over the year as ISPs rollout their own digital subscriber line access multiplexers (DSLAMs) using unbundled lines.

Figure 1.5: Internet subscribers by technology



Source: ABS, 8153.0—Internet Activity, Australia, June 2009.

24 ABS, 8153.0—Internet Activity, Australia, June 2009.

25 Market Clarity Database, June 2009.

**Table 1.3: DSL services in operation**

	Quarter				
	Jun-08	Sep-08	Dec-08	Mar-09	June 2009
Telstra wholesale and retail ADSL	3,150,832	3,147,778	3,100,083	3,058,194	3,014,158
Other Telstra DSL products	55,369	56,917	60,175	55,552	57,041
Unbundled lines	955,451	1,043,930	1,109,588	1,184,190	1,269,222
<b>Total</b>	<b>4,161,652</b>	<b>4,248,625</b>	<b>4,269,846</b>	<b>4,297,936</b>	<b>4,340,421</b>

Source: ACCC, Snapshot of Telstra's customer access network [www.accc.gov.au/content/index.phtml/itemId/853523](http://www.accc.gov.au/content/index.phtml/itemId/853523)

To offer DSL over an unbundled line, an ISP uses the Telstra copper line plus its own infrastructure in the exchange building. An unbundled service is either an unconditioned local loop service (ULLS) or a line sharing service (LSS).<sup>26</sup> At the end of June 2009, there were approximately 1.3 million unbundled lines an increase of 33 per cent since June 2008. Ninety-eight per cent of unbundled lines were in metropolitan areas. Services over unbundled local loops were available from 537 out of a total of 5,069 exchange service areas (ESAs) with the majority of these exchanges located in metropolitan areas. Table 1.4 presents data on the number of access seekers per exchange service area at June 2009. Of those ESAs with access seekers, 73 per cent had more than one access seeker.

Wireless technology is playing an increasingly important role in the provision of broadband access in Australia. There are two platforms for the provision of wireless internet services in Australia.

The first is fixed wireless, for example WIMAX, which uses an air interface as an alternative to other access media to connect a broadband service. There are approximately 233 fixed wireless providers in Australia, operating in both rural and metropolitan areas, compared with 223 reported by Market Clarity for the same period last year. The ABS reports that approximately two per cent of broadband connections are provided by fixed wireless broadband.

**Table 1.4: Number of ESAs by number of access seekers, June 2009**

Number of access seekers using ULLS and/or LSS	Number of ESAs
0	4,532
1	148
2	74
3	58
4	70
5 or more	187
<b>Total</b>	<b>5,069</b>

Source: ACCC, Snapshot of Telstra's customer access network [www.accc.gov.au/content/index.phtml/itemId/853523](http://www.accc.gov.au/content/index.phtml/itemId/853523)

26 There is further information on ULLS and LSS in the Glossary.

The second platform for wireless provision is mobile wireless broadband, where subscribers access the internet via mobile wireless data cards. Mobile wireless broadband speeds are continually increasing with Telstra now offering services to 21 Mbit/s with plans to upgrade to 42 Mbit/s. There are approximately 54 wireless broadband providers in Australia including mobile network carriers, resellers and mobile virtual network operators (MVNO).<sup>27</sup> The ABS estimates that mobile wireless broadband accounted for 23 per cent of all internet subscribers at June 2009 and is the fastest-growing broadband technology in Australia. This rise in the number of subscribers can be explained by the upgrade of mobile networks to 3G and increasing speeds allowed by 3G networks, as well as by the reduced prices and increased bandwidth available through mobile wireless broadband access plans.

Hybrid Fibre Coaxial (HFC) networks are operated by Telstra, Optus and Neighbourhood Cable. Telstra's network passes 2.5 million homes in Adelaide, Brisbane, the Gold Coast, Melbourne, Perth and Sydney. Optus' network passes 1.4 million homes Brisbane, Melbourne and Sydney. Taking into account coverage overlap the combined coverage of both networks is estimated to be 2.6 million homes.<sup>28</sup>

In Australia, the typical HFC network can provide bandwidth up to 30 Mbit/s and new technologies such DOCSIS 3.0 can offer much higher speeds. Telstra is in the process of upgrading its HFC network with DOCSIS 3.0 to reach speeds of up to 100Mbit/s. Melbourne is the first city to be upgraded with plans for completion by December 2009.<sup>29</sup>

Neighbourhood Cable Ltd delivers pay TV, broadband/ internet and VoIP telephony services over HFC cable networks in Mildura, Ballarat and Geelong in regional Victoria. In January 2008, Neighbourhood Cable was acquired by the Canberra-based TransACT Communications (TransACT). TransACT also provides very high bit rate digital subscriber line (VDSL) services to approximately 60,000 homes in Canberra.<sup>30</sup>

Satellite broadband services provide 100 per cent coverage of Australia's land area. In July 2009, there were around 47 satellite broadband service providers operating in Australia, with most being regional ISPs that resell satellite broadband to regional, rural and remote customers.<sup>31</sup>

### Government broadband initiatives

#### National Broadband Network

The Australian Government terminated the Request for Proposals (RFP) for the National Broadband Network (NBN) on 7 April 2009, on the basis of advice from an independent panel of experts that none of the national proposals offered value for money. The panel of experts noted the rapid deterioration of the global economy had a significant impact on the process.

In its place the Australian Government announced the establishment of a new company to invest up to \$43 billion over eight years to build and operate a NBN delivering superfast broadband to Australian homes and workplaces.<sup>32</sup> The new network will:

- > connect homes, schools and workplaces with optical fibre (fibre to the premises or 'FTTP'), providing broadband services to Australians in urban and regional towns with speeds of 100 Mbit/s
- > use next generation wireless and satellite technologies that will be able to deliver 12 Mbit/s to people living in more remote parts of rural Australia

27 Market Clarity Database, June 2009.

28 The ACMA. *ACMA Communications Report 2007–08*.

29 Telstra press release, *Telstra unveils super-fast cable broadband – Melbourne first to be upgraded*, 10 March 2009.

30 Paul Budde Communications Pty Ltd. *Australia Broadband-Network Operators and Wholesalers*, August 2009.

31 Market Clarity Database, July 2009.

32 [www.minister.dbcde.gov.au/media/media\\_releases/2009/022](http://www.minister.dbcde.gov.au/media/media_releases/2009/022)

- > provide fibre optic transmission links connecting cities, major regional centres and rural towns
- > be Australia's first national wholesale-only, open access broadband network
- > be built and operated on a commercial basis by a company established at arm's length from government and involve private sector investment
- > be expected to be rolled-out simultaneously in metropolitan, regional, and rural areas.

### **Regional Backbone Blackspots Program**

The Australian Government's Regional Backbone Blackspots Program is fast-tracking investment of \$250 million to improve regional broadband competition and services by addressing backbone blackspots throughout regional Australia. The program will:

- > deliver an immediate economic stimulus
- > reduce the cost of broadband services
- > put in place key infrastructure for the rollout of the NBN.

On 1 July 2009, the Australian Government announced the first round of regional locations for the \$250 million priority rollout of the NBN. The initial priority locations to receive investments are:

- > Emerald and Longreach, Queensland
- > Geraldton, Western Australia
- > Darwin, Northern Territory
- > Broken Hill, New South Wales
- > Victor Harbor, South Australia
- > South West Gippsland, Victoria.

### **Digital Regions Initiative**

As part of its initial response package to the Regional Telecommunications Review, the Australian Government announced \$46 million for the Digital Regions Initiative.

On 12 May 2009, the Australian Government increased the Digital Regions Initiative by \$14 million as part of the Rural and Regional National Broadband Network Initiative, bringing total funding to \$60 million over four years.

The Digital Regions Initiative will co-fund innovative digital enablement projects with state, territory and local governments. It is a collaborative approach to improve the delivery of education, health and/or emergency services in regional, rural and remote communities.

The Digital Regions Initiative aims to deliver innovative and sustainable projects that:

- > boost innovation in healthcare by enabling services such as remote consultation, diagnosis and treatment in areas where there are specialist skills shortages
- > increase the use of digital technologies to improve emergency and disaster response both within and across state and territory borders
- > improve and extend digital education services so that regional, rural and remote communities have the same access to educational opportunities.<sup>33</sup>

## **Carrier licensing**

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A variation in the number of licensed carriers is often seen as a useful indicator of telecommunications industry activity. Demand for licences and Nominated Carrier Declarations (NCDs) (Figure 1.6) generally coincides with periods of relative financial stability and also innovation in the market. However, the level of activity in 2008–09 appears to be unaffected by the global financial downturn. A range of factors might have contributed to the demand for licences including: the relatively low cost of infrastructure (most applicants (18) used wireless infrastructure); increasing demand for global services (five applicants used satellite infrastructure); and diversification (two utility companies commenced offering services).

33 [www.dbcde.gov.au/communications/digital\\_regions\\_initiative](http://www.dbcde.gov.au/communications/digital_regions_initiative)

Figure 1.6 shows the number of carrier licences granted and NCDs<sup>34</sup> made by the Australian Communications Authority and the ACMA each financial year since 2002.

The ACMA has granted 273 carrier licences since the introduction of the *Telecommunications Act 1997* (Telecommunications Act) and of these licensed carriers 175 are still active in the market. During the same period, 112 NCDs have been granted of which 72 are still active. In 2008–09, the ACMA granted 22 carrier licences and eight NCDs. In the same period, 21 carrier licences were surrendered, one cancelled and 11 NCDs revoked.

The number of carrier licences granted in 2008–09 was greater than the number in 2007–08, but was consistent with the long term average of approximately 22 carrier licences per year. In comparison, the number of NCDs granted by the ACMA in 2008–09, was slightly below the long term average of approximately nine per year.

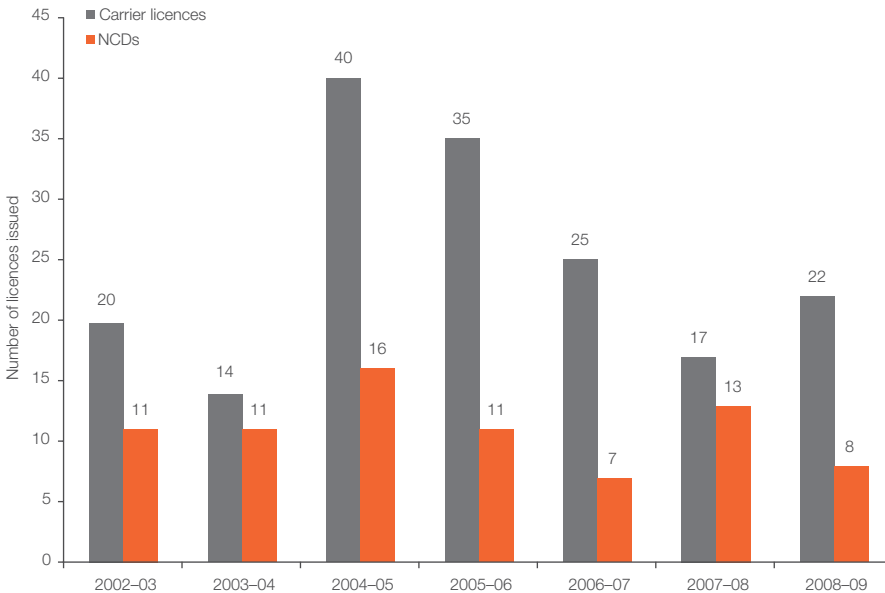
**Trial certificates**

Trial certificates allow for the testing of new networks and services. In 1998 the Minister made a determination under section 51 of the Telecommunications Act that carrier licensing requirements do not apply where the ACMA has issued a certificate.

In 2008–09, the ACMA issued one trial certificate to Qantas Airways Limited (Qantas). Qantas is an Australian domestic and international airline. The trial enabled Qantas to test OnAir connectivity services on its new Airbus A380 aircraft using the Inmarsat Swift 64 satellite services prior to a commercial launch.

OnAir is a brand name of a range of passenger communications services. The services provided under this trial were restricted to web-based email and instant messaging provided to airline passengers using their laptops or through the in-flight entertainment system. No similar service has been provided previously in Australia. OnAir has been granted a carrier licence and a NCD has been made for it to operate the service.

**Figure 1.6: Trends in carrier licensing**



Source: The ACMA.

34 A nominated carrier declaration (NCD) permits the owner of one or more network units to nominate a licenced carrier to supply carriage services over those units to the public, subject to the carrier satisfying the ACMA that it would be in a position to comply with carrier-related obligations with respect to those network units.

## Allocation of numbers

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### Telephone number allocations

In 2008–09, there was a decrease in the volume of digital mobile and geographic numbers allocated to carriage service providers (CSPs).

### Geographic numbers

During 2008–09, geographic numbers were predominantly allocated for voice services with demand less than in previous years. The allocation of geographic numbers decreased during 2008–09 to 3.13 million, compared with 4.5 million in 2007–08. Some geographic numbers continued to be allocated for fixed voice services supplied in conjunction with a digital or ‘3G’ network mobile services.

Figure 1.7 shows the allocation of geographic numbers between the financial years 2002–03 and 2008–09.

During 2008–09, 4,300 geographic numbers were surrendered by CSPs, down from 10,000 numbers surrendered during 2007–08 and 23,000 in 2006–07.

### Digital mobile numbers

During 2008–09, the number of requests for mobile numbers decreased slightly to 2.42 million numbers down from 2.9 million during 2007–08. A total of 46 million digital mobile numbers were allocated in Australia at 30 June 2009.

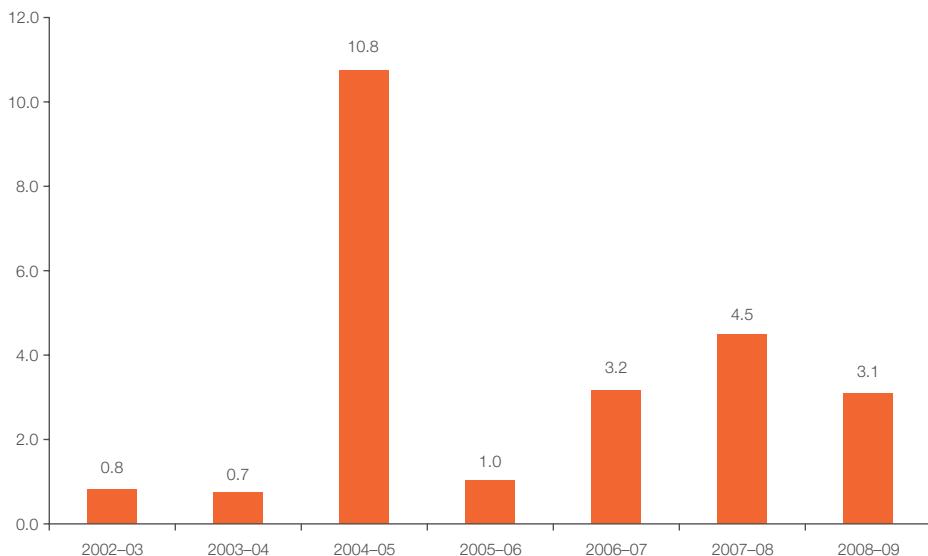
### smartnumbers®

In 2004, the **smartnumbers®** auction system was introduced as an allocation system for freephone and local rate numbers (FLRNs)—13, 1300 and 1800 numbers.

Purchasers of **smartnumbers®** are entitled to enhanced rights of use (EROU), which include the ability to trade or lease the EROU. Purchasers may hold the EROU to **smartnumbers®** for three years without an active service in place.

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Figure 1.7: Geographic number allocations (millions)



Source: The ACMA

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### **smartnumbers® activity**

An auction system was introduced as an efficient means of allocating these numbers and enables an appropriate return for this valuable and limited resource. The ACMA currently conducts a public auction each fortnight.

In 2008–09, the ACMA raised \$3,171,026 in revenue from the sale of 4,747 numbers through the **smartnumbers®** auctions. During the same period, a total of 49 **smartnumbers®** were allocated through public auctions to charities raising \$4,900 in revenue.

### **Location-independent communications service (LICS) numbers**

On 31 May 2007, the ACMA made available numbers commencing with 0550 for location-independent communication services (LICS). The number range was introduced for IP-based services which depart significantly from traditional telephone services, in particular, where the services are not fixed in a particular location, that is, they are nomadic.

New number ranges may take several years to be fully adopted by industry as interconnect agreements need to be in place before numbers can be issued to end users. The ACMA is not aware of any LICS numbers in use for services supplied between PSTN and IP telephony, although some may be in use on IP-based networks only.

A total of 39,000 LICS numbers were surrendered during 2008–09 and 7,000 numbers remain allocated to CSPs. No new allocations were made during 2008–09.

### **Other numbers**

There was limited demand for numbers other than geographic and digital mobile numbers, with the ACMA allocating one operator service number and six international signalling point codes during 2008–09.

## **Commercial broadcasting services**

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Commercial broadcasting services comprise free-to-air radio and television services that provide programs of appeal to a general audience that are made available for reception by the general public via commonly available equipment. These are usually funded by advertising revenue and are operated for profit or as part of a profit-making enterprise. Commercial free-to-air broadcasting services are also licensed to operate within a specified geographic area and have regulations to limit concentration of their ownership and control.

### **Changes in control of commercial television services**

A small number of changes occurred in the media industry during the 2008–09 financial year. Most of the ownership and control changes in the reporting year were as a result of financial or company restructures rather than the transfer of licences to different media networks or groups. The exception occurred in December 2008 with the divestment by James Packer/Consolidated Media Holdings Limited of holdings in PBL Media Holdings Pty Ltd and the Nine Network. A discussion of broadcasters' compliance with notification of change in control requirements is provided in Chapter 6 of this report.

Three networks—Seven, Nine and Ten—operate commercial television broadcasting licences in various metropolitan markets and their programming is made available in regional markets through affiliation agreements with the regional television licences controlled by Prime Television, Macquarie Southern Cross and WIN Media. Imparja Television holds a licence to broadcast in the remote central and eastern Australia licence area.

### **Seven Network**

The Seven Network controls six commercial television licences and operates television stations in the metropolitan mainland markets of Sydney, Melbourne, Brisbane, Adelaide and Perth, and one regional network covering Queensland.

### **Nine Network**

The Nine Network controls six commercial television licences and operates television stations in the metropolitan mainland markets of Sydney, Melbourne, Brisbane and Darwin, including a digital television joint venture with Macquarie Southern Cross, and one regional licence in northern New South Wales.

### **Ten Network**

Ten Network controls five commercial television licences and operates television stations in the metropolitan mainland markets of Sydney, Melbourne, Brisbane, Adelaide and Perth.

### **WIN Television**

The WIN Media group controls 12 regional commercial television licences across Australia including a digital television licence in Tasmania through a joint venture partnership with Macquarie Southern Cross and a digital television station in Mildura through a joint venture partnership with PRIME Television.

WIN Media group also control two commercial television licences affiliated with Nine network programming in the Perth and Adelaide metropolitan markets.

They also control a further four new digital television licences in Western Australia—joint ventures with the Prime group—which are yet to commence broadcasting.

### **Macquarie Southern Cross Television**

The Macquarie Southern Cross group controls 14 regional commercial television licences across Australia including joint ventures in relation to digital television stations in Darwin and Tasmania.

### **PRIME Television**

The PRIME Television group controls nine regional commercial television licences across Australia including a joint venture partnership with the WIN Media group in the Mildura digital television licence.

They also control a further four new digital television licences in Western Australia—joint ventures with the WIN Media group—which are yet to commence broadcasting.

## **Ownership and control of commercial radio services**

Radio ownership arrangements continued to show differences between capital city and regional markets. The Austereo Group, Australian Radio Network (ARN), DMG Radio and Fairfax Media own the majority of capital city commercial radio broadcasting licences.

Macquarie Southern Cross (MSC), Super Radio Network Broadcast Operations and Grant Broadcasters remain the three largest networks of regional commercial radio broadcasting licences.

Twelve radio licence owner groups control five or more commercial radio broadcasting licences—ACE Radio, ARN, Austereo Group, Capital Radio Network, DMG Radio, Fairfax Media Ltd, Grant Broadcasters, Macquarie Southern Cross, Prime, Redwave Media, the Smart Radio Group and Super Radio Network. Another 20 radio licence owners/controllers hold fewer than five licences each.

### **Cross-media ownership**

A small number of companies control two types of media assets in the same market. Macquarie Southern Cross controls a combination of radio and television broadcasting licences in 31 licence areas compared with 26 licence areas in 2007–08.

Fairfax Media Ltd controls both radio licences and a newspaper in two metropolitan licence areas, Sydney and Melbourne.

The Seven Network Ltd controls a television licence and is deemed to be in a position to exercise control of a newspaper in the Perth metropolitan licence area.

As a result of provisions in the Act that pre-date the 2006 changes to the media ownership laws, WIN Corporation controls a radio and television licence in the Wollongong licence area. These arrangements are unchanged from 2007–08.

## Register of Controlled Media Groups

The Register of Controlled Media Groups is a core component of media ownership rules. The register, published on the ACMA's website, provides information to industry and the community about the existence of registered media groups operating in licence areas across Australia, the media operations that form each group, and the controllers of those operations. When the register was first published in March 2007, it contained 131 media groups. The number had increased to 160 by 30 June 2009, a slight change on the 159 media groups registered at June 2008.

## Subscription television in Australia

As at 30 June 2009, there were over 2.3 million household subscribers to subscription television broadcasting services in Australia compared with 2.2 million household subscribers at 30 June 2008.

Foxtel reported 1.63 million direct and wholesale subscribers. Their managed subscribers increased by eight per cent while wholesale subscribers fell by 15 per cent.<sup>35</sup> According to the company, the growth in Foxtel's managed subscribers was driven by record gross additions—an increase of 110,000 subscribers over the 12 months—combined with sound churn performance. In the first half of the financial year, churn was 13.3 per cent which was slightly lower than the 13.4 per cent in the previous corresponding period. Churn improved in the second half of the year to 12.9 per cent compared with 13.3 per cent during the same period last year.

Austar has 728,719 subscribers, an increase of 4.8 per cent during the 2008–09 financial year.<sup>36</sup> Residential subscribers to Austar increased by 3.6 per cent to 608,000 while commercial subscribers increased by 12 per cent to 121,000. Average monthly customer churn decreased to 1.27 per cent, down from the first quarter rate of 1.52 per cent.<sup>37</sup>

Subscription television services in Australia continue to evolve with new online delivery methods such as IPTV emerging in Australia. The Australian market has experienced limited growth in IPTV to date.

## Community broadcasting services

Community broadcasting services are free-to-air television and radio licensees that service the needs of specific communities. These services must not be operated for profit or as part of a profit-making enterprise.

## Community radio services

At 30 June 2009, there were 350 community radio broadcasting licensees with two licenses being surrendered since June 2008. The services represent a range of community interests (see Table 1.5). Forty-seven per cent of community radio broadcasting services served the general community in their respective licence areas.

During 2008–09, the ACMA:

- > renewed 33 community radio broadcasting licences
- > advertised for applications for community radio broadcasting licences in Gosford and Lake Macquarie (NSW) and in Freemantle and Perth (WA).

In the same period:

- > the ACMA renewed 10 community radio broadcasting licences, one after being offered enforceable undertakings
- > the ACMA did not refuse to renew any community radio broadcasting licences
- > one community radio licence expired
- > two community radio licences were surrendered.

35 FOXTEL, *Foxtel announces solid subscriber and financial growth in a tough environment*, [www.foxtel.com.au/about-foxtel/communications/foxtel-announces-solid-subscriber-and-financial-growth-in-a-21656.htm](http://www.foxtel.com.au/about-foxtel/communications/foxtel-announces-solid-subscriber-and-financial-growth-in-a-21656.htm), 13 August 2009.

36 Austar United Communications Limited, *First Half 2009 Year results*, [www.austarunited.com.au](http://www.austarunited.com.au), 30 July 2009.

37 Austar United Communications Limited, *Ongoing growth in a challenging environment in Austar's H1 results*, [www.austarunited.com.au](http://www.austarunited.com.au), 30 July 2009.

**Table 1.5: Community radio broadcasting services by community interest served, June 2009**

<b>Community interest</b>	<b>Number</b>	<b>Percentage of total</b>
Aboriginal and Torres Strait Islander	99	28
Educational/special interest	21	6
Ethnic	6	1.7
General geographic area	166	47
Music	6	1.7
Religious	35	10
Senior citizen	9	2.6
Youth	8	2.3
<b>Total</b>	<b>350</b>	<b>100</b>

Source: The ACMA.

### Temporary community radio broadcasting licences

The temporary community radio broadcasting licence scheme allows the ACMA to allocate non-renewable community radio broadcasting licences to eligible aspirant broadcasters. Licences are only allocated if spectrum in the broadcasting services bands (BSBs) is available for transmission. Temporary licences are allocated for a maximum period of 12 months. During the reporting period, the ACMA allocated 60 temporary licences. There were 65 temporary licences in operation at 30 June 2009 compared with 52 licences at 30 June 2008.

### Community television services

There were 81 community television broadcasting licensees at 30 June 2009, of which 78 were for remote Indigenous broadcasting services. During 2008–09, the ACMA renewed three community television broadcasting licences for remote Indigenous broadcasting services and three other community television licences. There were 82 community television broadcasting licensees at 30 June 2008.

### Community television trials

In 2008–09, the ACMA also made spectrum available for community television trials in Adelaide (5 July 2008 to 4 July 2009), Lismore (29 June 2008 to 28 June 2009) and Perth (16 April 2009 to 15 April 2011). These services are provided under the open narrowcasting class licence, using apparatus licences with a condition requiring the transmitter to be used only to provide an open narrowcasting television service for community and educational non-profit purposes.

### Other broadcasting services

#### Subscription broadcasting services

The ACMA may allocate licences for subscription television broadcasting services upon application and payment of a determined fee. Subscription television broadcasting services can be provided using any delivery system, for example satellite, cable or other means.

During 2008–09, the ACMA allocated one subscription broadcasting television licence to United Broadcasting International Pty Ltd. This licence increased the total number of subscription broadcasting television licences allocated by the ACMA to 2,591.

#### Open narrowcasting services

There are two types of open narrowcasting services available: high power open narrowcasting (HPON) services and low power open narrowcasting (LPON) services. Open narrowcasting services are free-to-air broadcasting services whose reception is limited in a least one of following ways:

- > by being targeted to special interest groups
- > by being intended only for limited locations
- > by being provided during a limited period or to cover a special event
- > by providing programs of limited appeal
- > for another reason.

The ACMA has determined a class licence for the operation of open narrowcasting services. Persons providing such a service are not required to obtain a broadcasting licence. However, if they intend to use the radiofrequency spectrum to provide the service, they must obtain an apparatus licence which authorises the operation of a transmitter under the *Radiocommunications Act 1992*.

**HPON services**

There are currently 242 apparatus licences issued to provide HPON radio services and 55 for HPON television services. The ACMA did not allocate any new apparatus licences for HPON radio or television services during 2008–09.

**LPON services**

LPON services are usually made available in the FM spectrum 87.6–88.0 MHz. There are currently 1,993 apparatus licences issued to provide LPON radio services around Australia. During 2008–09, the ACMA issued 105 new apparatus licences for LPON services.

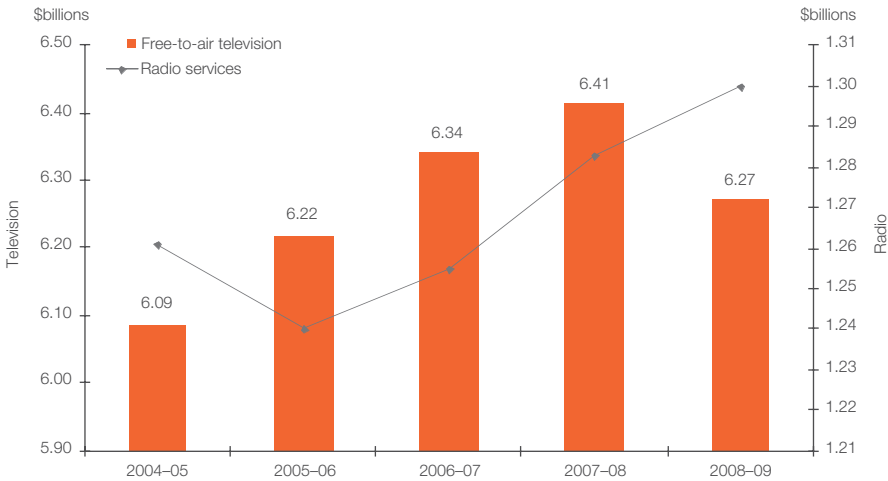
**International broadcasting licences**

This licence category applies to any broadcasting service targeted to audiences outside Australia where the means of delivery involves using a radiocommunications transmitter located inside Australia. During 2008–09, the ACMA allocated one international broadcasting licence to TDP/TDP Radio.

Twelve international broadcasting licences have previously been allocated to four other licensees as follows:

- > four to *Heralding Christ Jesus’ Blessings (HCJB) Australia*
- > six to *CVC Network Ltd*, the media arm of *Christian Vision*, a UK non-profit charitable company
- > one to *AsiaSpace Ltd*
- > one to the *Japan Center for Intercultural Communications*.

**Figure 1.8: Free-to-air broadcasting industry revenues, Australia, 2004–05 to 2008–09 (constant prices)**



Source: IBISWorld, *Free to Air Television and Radio Services in Australia*, March 2009.

## Free-to-air broadcasting industry revenues

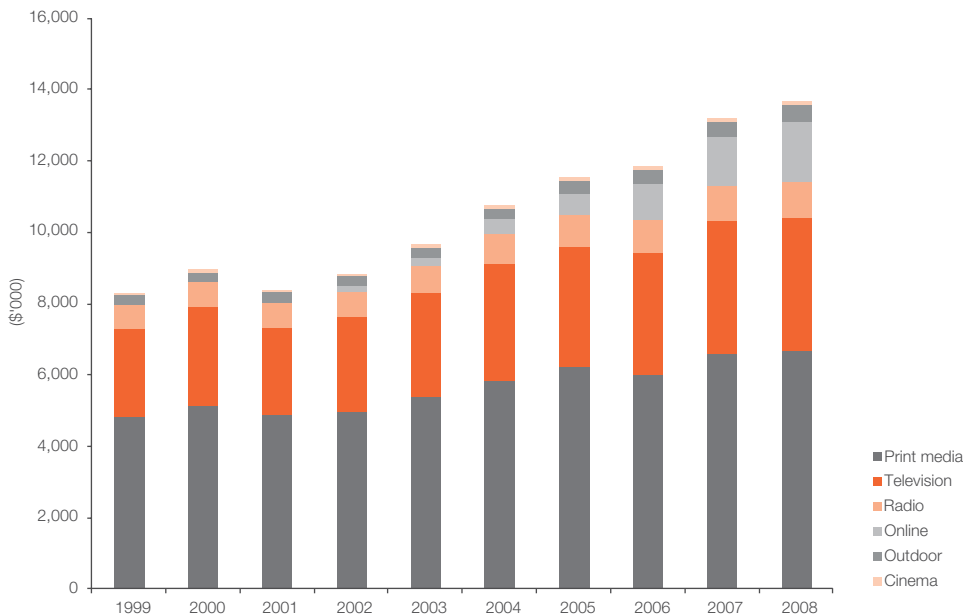
The free-to-air broadcasting sector in Australia is a significant contributor to the Australian economy accounting for estimated total revenue of \$7.57 billion and approximately 16,859 employees during 2008–09. The free-to-air television services industry is estimated to have generated revenue of approximately \$6.27 billion during 2008–09 compared with \$6.41 billion during 2007–08; a decline of just over two per cent. Revenue for the radio services sector was estimated to be \$1.3 billion compared with \$1.28 billion during the previous reporting period.<sup>38</sup> Figure 1.8 presents a historical comparison of revenue generated for both sectors.

## Advertising expenditure

Trends in advertising expenditure are an indicator of consumer and business confidence and the emerging significance of alternative advertising channels such as the internet. These trends also provide insights into changing patterns of media consumption by Australian audiences.

Income from advertising is the main source of revenue for the commercial broadcasting sector in Australia. The Commercial Economic Advisory Service of Australia (CEASA) report for the year ended 31 December 2008<sup>39</sup> estimates that total advertising expenditure increased by 3.7 per cent in 2008 to \$13.7 billion. When the classified directories and online categories are excluded, advertising expenditure increased by 0.4 per cent in 2008 to \$10.42 billion. For the 2007 period, the comparable figure was \$10.37 billion.

Figure 1.9: Distribution of advertising expenditure across main media, 1999–2008



Source: Commercial Economic Advisory Service of Australia, Year ended 31 December 2008.

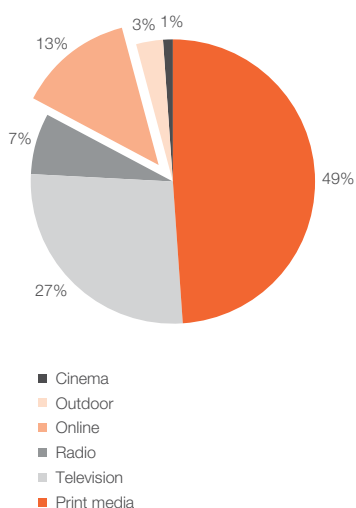
38 IBISWorld. *Free to Air Television Services and Radio in Australia*, March 2009. Estimates of revenue are in constant 2009 prices. Revenue generated includes government grants, funding and subsidies, advertising, sponsorships income and value of contra arrangements and other revenue generating activities.

39 Commercial Economic Advisory Service of Australia (CEASA), *Advertising expenditure in main media: Year ended 31 December 2008*, April 2009, p.6.

As Figure 1.10 shows, in 2008, the print (49 per cent), television (27 per cent), online (13 per cent) and radio (seven per cent) media attracted the majority of advertising expenditure. Online advertising expenditure in Australia grew by 27 per cent to total 1.7 billion, which represented a 13 per cent share of total advertising expenditure. In 2007, the online sector had a 10 per cent share.

In 2008, print and broadcast media's share of total advertising expenditure (including online and directories) fell below 50 per cent. Television's share of total advertising expenditure decreased to 27 per cent in 2008 compared with 28 per cent share in 2007.

**Figure 1.10: Advertising expenditure by main media categories**



Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2008.

## Television

Table 1.6 provides a year-on-year comparison of advertising expenditure on television in 2007 and 2008. The free-to-air television sector's percentage share of total advertising expenditure declined slightly over 2008. Metropolitan television reported a year-on-year decrease of 2.4 per cent while regional television reported an increase of 0.4 per cent. In the same period, subscription television increased its percentage share of total advertising expenditure from 2.1 per cent in 2007 to 2.3 at the end of 2008. For 2008, subscription television recorded advertising expenditure of \$317 million, an increase of 15 per cent over the previous year's performance of \$275.6 million.

Free-to-air television advertising expenditure (excluding SBS Television) is concentrated on the eastern seaboard states with New South Wales accounting for \$1,306.1 million, Victoria \$829.2 million and Queensland \$636.8 million.

## Online

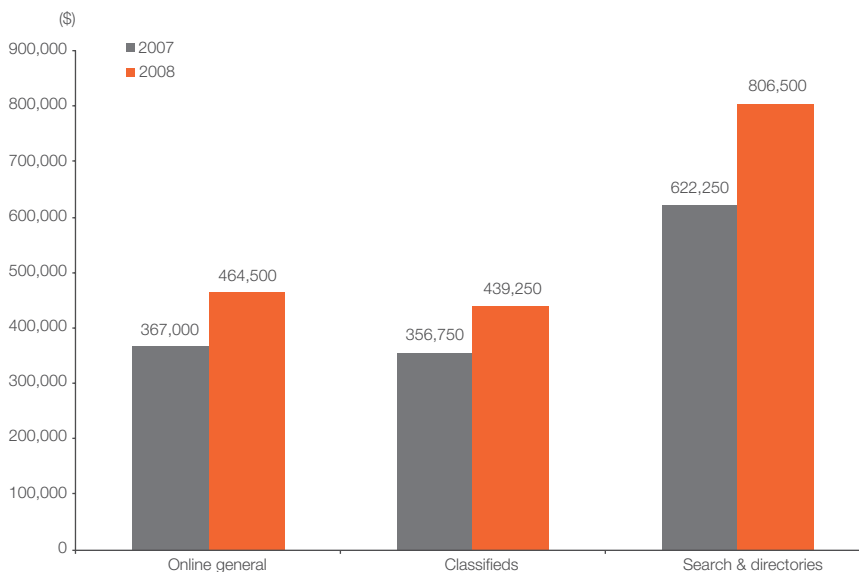
Figure 1.11 shows that the continued growth in online advertising expenditure during 2008 was characterised by strong growth across all advertising categories. Revenue in the General (\$464 million) and Classifieds (\$439 million) categories accounted for 27.2 and 25.7 per cent of the total online advertising spend respectively. The Search and Directories category accounted for the remaining 47.2 per cent. As in 2007, search and directories advertising sector grew the fastest, with a year-on-year expenditure increase of 29.6 per cent.

**Table 1.6: Advertising expenditure on television, 2007 and 2008**

Television Platform	2007 Total (\$'000)	% Total advertising expenditure	2008 Total (\$'000)	% Total advertising expenditure	% Total change
Metropolitan television	2,681,974	20.3	2,616,506	19.1	-2.4
Regional television	792,633	6.0	795,448	5.8	0.4
Subscription television	275,624	2.1	317,016	2.3	15.0
Total television	3,750,231	28.4	3,728,970	27.3	-0.6

Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2008.

Figure 1.11: Main categories of online advertising expenditure, 2007 and 2008



Source: Commercial Economic Advisory Service of Australia, Year ended 31 December 2008.

## Further information

### Publications

- > Australian Bureau of Statistics, *8153.0–Internet Activity, Australia*, June 2009.
- > Commercial Economic Advisory Service of Australia (CEASA), *Advertising expenditure in main media: Year ended 31 December 2008*, April 2009.
- > IBISWorld. *Free to Air Television Services and Radio in Australia*, March 2009.

### Organisations

- > Australian Bureau of Statistics  
[www.abs.gov.au](http://www.abs.gov.au)
- > Australian Competition and Consumer Commission [www.accc.gov.au](http://www.accc.gov.au)
- > Market Clarity [www.marketclarity.com.au](http://www.marketclarity.com.au)