Communications
report
2012–13

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Australian
Communications
and Media Authority

Communications report
2012–13

The ACMA *Communications report 2012–13* draws on data from a range of sources including the ACMA's own databases, information reported by industry, the ACMA's research using third-party public sources, and commissioned surveys and analysis.

The ACMA has a statutory reporting obligation that requires it to collect data from industry for monitoring and reporting purposes. However, as part of the Australian Government's regulation reform agenda, the ACMA will continue to work with industry participants to identify opportunities to streamline regulatory reporting arrangements.

Disclaimer
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Comments
The ACMA welcomes feedback on the communications report. Comments and enquiries about the scope, content and format of the report should be sent to communications.analysis@acma.gov.au.

Further information
For further information about the ACMA and links to the communications report, please go to www.acma.gov.au/commsreport.

4 November 2013

The Hon. Malcolm Turnbull, MP
Minister for Communications
Parliament House
Canberra ACT 2600

Dear Minister

ACMA Communications report 2012–13

I am pleased to provide you with the *ACMA Communications report 2012–13*.

This publication incorporates a report on telecommunications performance for 2012–13, prepared in accordance with section 105 of the *Telecommunications Act 1997*.

The statutory reporting obligations under the *Telecommunications Act 1997* are fulfilled in the following chapters of the communications report:

> 105(3)(a) and (b), which relate to the efficiency of supply of telecommunications services and the adequacy and quality of such services and billing information—Chapters 1, 3 and 5;

> 105(3)(c) and (d), which relate to carrier and carriage service provider obligations under Part 6 of the *Telecommunications Act 1997* with respect to industry codes and standards—Chapter 3;

> 105(3)(e) and (ea), and 105(4), which relate to industry performance in fulfilling universal service obligation and Customer Service Guarantee obligations—Chapter 3; and

> 105(5A), which relates to national interest matters and cooperation with law enforcement agencies—Chapter 2.

Please note that subsection 105(7) of the *Telecommunications Act 1997* requires that you table the report in each House of the Parliament within 15 sitting days of that House after you have received the report.

Yours sincerely

Chris Chapman
Chairman

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Chairman's foreword

I am pleased to present the *ACMA Communications report 2012–13*, the eighth edition produced since the establishment of the ACMA in July 2005.

The annual communications report addresses the statutory requirements under section 105 of the *Telecommunications Act 1997* to report on the performance of carriers and carriage service providers in meeting service and compliance obligations, consumer satisfaction, consumer benefits and quality of service. A comprehensive overview of the performance of the broadcasting industry in meeting regulatory obligations is also provided.

The communications report again provides critical insights into the developing digital economy and its impacts on the communications and media sectors that the ACMA regulates. During 2012–13, the digital economy in Australia grew strongly as evidenced by, for example, increasing levels of online participation, the growth in intensity and economic value of activities performed online and the surge in the volume of data being downloaded by Australian internet users.

This report also suggests that while Australians are continuing to derive real benefits from increased online engagement, the rapid take-up of over-the-top (OTT) services delivered via the internet presents an ongoing challenge to established business models in terms of declining use of traditional voice and content services.

This year we have introduced a number of changes to the reporting program to add further value to the communications report.

In further recognition of the global nature of communications, we have included international data for the first time, allowing some comparisons of Australia's progress in the digital economy relative to other countries. We intend to expand this feature in future reports.

The ACMA has also introduced its inaugural *ACMA research snapshot series*—concise, 'fit-for-purpose' research updates on key issues of relevance to the ACMA and its stakeholders. These snapshots are published in blog, video and infographic format, as a complement to the communications report.

I commend the ACMA *Communications report 2012–13,* and related complementary reports and snapshots, as an essential evidence-base to analyse and understand the rapidly changing communications and media environment in Australia. In the spirit of continually striving to improve its research and reporting program, the ACMA welcomes any feedback on this report as a key component of its research and reporting program.

Chris Chapman
Chairman

Introduction and executive summary

Introduction

Legislative basis

The *Communications report 2012–13* fulfils the ACMA's statutory reporting requirements under the *Telecommunications Act 1997* (the Act). Section 105 of the Act requires the ACMA to report annually on the performance of carriers and carriage service providers (CSPs) in meeting regulatory obligations with specific reference to consumer satisfaction, consumer benefits and quality of service. Information about the broadcasting industry's performance in meeting regulatory obligations is also included in this report—a reflection of the ACMA's role as a converged communications and media regulator.

Scope and structure

The *Communications report 2012–13* comprises the following chapters:

> Chapter 1—*The Australian communications and media market* presents a detailed analysis of key supply and demand side developments in the communications and media markets in Australia during the 2012–13 reporting period, including key mergers and acquisitions, new service offerings, developments relating to the rollout of digital economy infrastructure and changing consumer communications and media preferences.

> Chapter 2—*National interest issues* presents information about the performance of the emergency call services, an update on the cost of maintaining communication interception capabilities, the disclosure of customer information in support of law enforcement and investigations, submarine cable infrastructure protection and radiofrequency interference complaints.

> Chapter 3—*Telecommunications consumer safeguards and quality of service* examines the performance of key communications safeguards such as the Customer Service Guarantee Standard (CSG Standard), priority assistance and the Network Reliability Framework, the Do Not Call Register (DNCR) and related unwanted communications rules covering telemarketing investigations and spam complaints. This chapter also examines number portability, complaints to the Telecommunications Industry Ombudsman (TIO) and current levels of consumer satisfaction with fixed-voice, mobile phones and internet services.

> Chapter 4—*Broadcasting industry regulatory performance* discusses the performance of Australian broadcasters in meeting their regulatory obligations relating to broadcasting Australian content, changes in media ownership and control, the digitalisation of broadcasting services and complaints to the ACMA about broadcasting matters and prohibited online content.

> Chapter 5—*Consumer benefits from participating in the digital economy* examines the latest findings on Australians' increasing engagement with the online economy and some of the impacts of the shift to the online environment.

Executive summary

Key trends

The ACMA *Communications report 2012–13* highlights key developments in Australia relating to the ongoing transition to online and internet-protocol (IP) services delivery models and their impacts on the communication and media sectors that the ACMA regulates. These developments continue to provide strong evidence of the growing scale of the digital economy in Australia and of the ongoing challenges this brings to traditional communications and broadcasting regulation, such as fixed-voice consumer safeguards, online protections and the representation of Australian content in new online delivery channels.

During 2012–13, Australia's digital economy continued to grow strongly with increases in levels of internet access, frequency of internet use and intensity of online engagement—a trend seen over the last five years. This increased engagement with the digital economy also continues to shape and challenge the existing business models of carriers, CSPs and traditional content providers such as broadcasters and print news operators. Four highlights are:

1. a continued surge in the volume of data being downloaded, largely driven by fixed-line broadband users

2. increased use of online content streaming services such as catch-up TV, video on demand and IPTV, with cloud computing contributing to the growth in data downloads

3. growth in the use of internet services via mobile phone handsets—particularly smartphones—and tablets

4. a jump in the number of people using over-the-top (OTT) communications, such as Skype, via tablets and mobile phones—challenging traditional fixed-line telephone and mobile voice revenues.

Consumer benefits from participation in the digital economy

Internet connectivity levels continue to increase in Australia:

> 7.50 million people used the internet via their mobile phone during June 2013, a 33 per cent increase over the number of mobile internet users during June 2012.

> 14.24 million people had access to the internet in the home at June 2013, an increase of two per cent since June 2012.

> 13.15 million people had a home broadband internet service at June 2013, an increase of seven per cent since June 2012.

> Mobile phone internet use continued to develop primarily as a complement to the use of fixed-line broadband services with 63 per cent of mobile phone internet users also with a home fixed-line internet service.

Australians are more intensive users of the internet:

> 676,898 terabytes of data downloaded by internet users during the June quarter 2013, a 59 per cent increase over the June quarter of 2012.

> Fixed-line broadband users continue to dominate the digital economy in terms of data downloaded accounting for 93 per cent of the total volume of data downloaded during the June quarter of 2013.

> Fixed-line broadband users also accounted for 95 per cent of the growth in the volume of data downloaded, downloading 108 times more data per subscriber than a mobile handset internet user during the June quarter of 2013.

> 10.81 million people went online more than once a day at June 2013, an increase of seven per cent since June 2012 and 72 per cent since June 2008.

> 43 per cent of internet users undertook five or more separate activities online during June 2013, a four percentage point increase since June 2012 and a 31 percentage point increase since June 2008.

> 9.26 million people streamed video or audio content online during the six months to May 2013, a three percentage point increase over the six months to May 2012, contributing to the growth in the volume of data downloaded.

> 14 million people used cloud services such as web email, online file, and video and photo storage in the six months to May 2013, an 11 per cent increase over the six months to May 2012—also a contributor to growth in volume of data downloaded.

The economic value of transactions occurring over the internet continued to surge:

> The latest available data shows that revenue from the sale of goods or services online by businesses operating in Australia reached $237 billion during 2011–12, a 25 per cent increase over 2010–11. Expenditure on online advertising increased to $3.34 billion during 2012, an increase of 26 per cent over 2011.

> More Australians are transacting online with 12.86 million people using the internet for banking or paying bills and 10.44 million buying or selling goods or services online in the six months to May 2013, a 10 per cent and 9 per cent increase respectively over the six months to May 2012.

The communications and media market

Growing participation in the digital economy also saw a continuation of the shift in consumer communications preferences from fixed-line voice telephony to online and mobile communications during 2012–13.

> Mobile services in operation (including voice and data) reached 31.09 million, a three per cent increase since June 2012, with the rate of increase comparable to 2011–12 but considerably lower than the 13 per cent increase for 2010–11.

> Growth in the mobile services market was driven by replacement of existing mobile phone handsets with smartphones, with 11.19 million people with a smartphone at May 2013, an increase of 29 per cent since May 2012.

> The number of mobile phone users without a home fixed-line telephone service reached 3.68 million people, an increase of 18 per cent since June 2012.

> 53 per cent of people identified mobile phones as their most used communication service in the six months to May 2013, compared to 16 per cent for a home fixed-line telephone.

> Fixed-line telephone services in operation declined by one per cent to 10.32 million in line with the trend over the last two financial years.

> Users of voice over internet protocol (VoIP) services increased by six per cent to 4.59 million people with the majority of growth in VoIP usage related to the use of OTT services such as those offered by Skype.

> Growth in the use of OTT communications continues to challenge traditional voice service revenues. The number of people using VoIP services via mobile phones increased by 73 per cent to reach 1.06 million while the number of people using VoIP services via tablets increased by 150 per cent to reach 966,000.

> A 13 per cent increase in the number of internet subscribers in Australia in the 12 months to June 2013 to reach 32.00 million with growth comprising a:

> > four per cent increase in fixed-line broadband internet subscribers (including National Broadband Network (NBN) subscribers) to reach 5.84 million subscribers

> > 17 per cent increase in mobile broadband internet subscribers (including handset subscribers) to reach 25.80 million subscribers.

> The strong growth in take-up of mobile broadband internet services in Australia is also reflected in research undertaken by the Broadband Commission for Digital Development which shows that in 2012, out of 189 countries, Australia was ranked:

> > sixth in terms of mobile broadband penetration per 100 inhabitants

> > 29th in terms of fixed broadband penetration per 100 inhabitants.

The growth in consumer participation in the digital economy included a continuation of the shift to online service delivery models by traditional broadcasters and print media operators to meet rising demand for online content services.

> 7.86 million people used professional content services such as catch-up TV, video on demand and IPTV in the six months to May 2013, an increase of 52 per cent compared to the six months to May 2012.
> 5 million people accessed online radio stations in the six months to May 2013, a six per cent increase in comparison to the six months to May 2012.

Growth in online participation and service delivery has also been enabled by the continued development of Australia's digital economy infrastructure with key drivers being the rollout of 4G mobile networks and the NBN.

4G mobile:

> Networks:
>> Telstra reported that its 4G network covered 66 per cent of the total Australian population at June 2013, up from 40 per cent at June 2012.
>> Optus reported that its 4G network covered the main capital cities with services commencing in Canberra in May 2013.
>> VHA's 4G network became operational in June 2013 and opened to new customers in July 2013.
> Services in operation:
>> Telstra reported 2.80 million 4G mobile services in operation at June 2013, up from 375,000 at June 2012.
>> Optus reported 1.08 million 4G services in operation at June 2013.

NBN:

> 207,543 premises were passed by the NBN fibre network at June 2013 (38,914 at June 2012) and 277,256 premises were covered by the NBN fixed-wireless and satellite network (173,885 at June 2012).
> 33,586 premises had activated NBN fibre network services at June 2013 (3,867 at June 2012), and 36,514 premises were activated with fixed-wireless or satellite NBN services (9,669 at June 2012).

National interest issues

During 2012–13, the performance of emergency call service met regulatory requirements.

> The number of calls to the emergency service numbers Triple Zero and 112 decreased by six per cent to 8.85 million.
> Telstra continued to perform above the regulatory requirement in relation to the emergency call service answering 95.8 per cent of calls to Triple Zero and 112 within five seconds and 99.1 per cent of calls within 10 seconds.

In relation to disclosures and interception during 2012–13:

> Disclosures of customer information made by carriers and CSPs under Part 13 of the Act and/or under the *Telecommunications (Interception and Access) Act 1979* decreased by two per cent to 685,757.
> The cost to industry of providing interception capability was $18.4 million, an increase of nine per cent in comparison to 2011–12.
> The number of connected records on the Integrated Public Number Database increased by three per cent to 64.1 million.

Telecommunications consumer safeguards and quality of service

During 2012–13:

> total payphone numbers declined by five per cent to 29,523
> in relation to the CSG Standard:
>> fixed-line telephone services in operation covered by the CSG Standard fell by six per cent to 6.68 million services
>> the number of customers who waived their rights under the CSG Standard increased by nine per cent to 247,657
>> the performance of the major CSPs in meeting CSG Standard time frames for new service connections ranged from 89 per cent (Telstra) to 100 per cent (Primus), and fault repairs ranging from 91 per cent (Telstra) to 99 per cent (Primus)
>> there were 263 instances where CSPs claimed exemptions from the CSG Standard
>> CSP compensation payments to customers as a result of failing to meet CSG Standard time frames totalled $7.89 million, an increase of nearly 37 per cent
> the number of priority assistance customers increased by 16 per cent to 257,137
> porting of local numbers increased by 22 per cent to 763,422 while mobile number ports decreased by 34 per cent to 1.74 million
> unwanted communications:
>> the number of telephone numbers registered on the DNCR increased by 13 per cent to 8.74 million
>> complaints to the ACMA concerning potential breaches of the *Do Not Call Register Act 2006* (DNCR Act) decreased by 10 per cent to 19,677
> consumer satisfaction with communications services:
>> the number of new complaints to the TIO decreased by 18 per cent to 158,652
>> consumers continued to be generally satisfied with their communications services although overall satisfaction levels were higher for fixed-line (71 per cent) and internet (76 per cent) users than for mobile phone (69 per cent) and VoIP (55 per cent) users. Levels of overall dissatisfaction with communications services ranged from eight per cent (internet) to 13 per cent (VoIP).

Broadcasting industry performance

During 2012:

> in addition to meeting their regulatory requirements for transmitting Australian content all free-to-air commercial television stations broadcasted more than the required 80 per cent of Australian advertising
> commercial and national television broadcasters required to transmit the high definition television (HDTV) quota complied with their quota requirements.
> all regional television licensees in Queensland, New South Wales, Victoria and Tasmania (with the exception of Tasmanian Digital Television) reported that they met the minimum quota requirements for providing local information
> all commercial radio broadcasting licensees broadcasted the required amount of material of local significance.

During 2012–13:

> for national and commercial services, rollout of required digital television services was complete in metropolitan areas, reached 100 per cent and 99 per cent respectively in regional areas, and 97 per cent for both in remote areas

> the shift from analog services continued with services switched off in most areas around Australia, with the exception of Darwin (switched off on 30 July 2013), Sydney (planned for 3 December 2013) and Melbourne and Remote Central and Eastern Australia licence areas (planned for 10 December 2013)

> community television broadcasters in metropolitan areas (Sydney, Melbourne and Brisbane) have completed the switchover and are all transmitting only digital services

> written complaints and enquiries to the ACMA concerning broadcasting matters decreased by four per cent to 2,178

> complaints concerning online content decreased by eight per cent to 4,633.

Complementary reporting program

The ACMA has continued with its practice of releasing a suite of targeted reports that complement the statutory communications report. These complementary reports focus in more detail on key aspects of the digital economy. The two reports released as part of the 2012–13 complementary series are:

> *Report 1—Australian SMEs in the digital economy*

> *Report 2—Cloud computing in Australia.*

ACMA research snapshots series

The ACMA has also developed the *ACMA research snapshots* series—short, fit-for-purpose research updates on key issues of relevance to the ACMA and its stakeholders. Snapshots released this year include:

> *Australians cut the cord: becoming mobile only*

> *The connected business*

> *Home is where the work is: the digital worker*

> *Mobile apps: putting the 'smart' in smartphones*

> *Regional Australia in the digital economy*.

The ACMA *Communications report 2012–13* and related reports can be accessed at www.acma.gov.au/commsreport.

Key indicators—at a glance

Telecommunications services

Number of services

	Jun-12	Jun-13	% change
Mobile services (voice and data)	30.20 m	31.09 m	+3%
Mobile internet services*	22.05 m	25.80 m	+17%
Fixed-line telephone services[†]	10.44 m	10.32 m	−1%
Mobile phone users without a home fixed-line telephone[§]	3.13 m	3.68 m	+18%
Home VoIP users[§]	4.34 m	4.59 m	+6%
Mobile phone VoIP users[§]	0.616 m	1.063 m	+73%
	May-12	**May-13**	**% change**
People aged 18 years and over with a smartphone	8.67 m	11.19 m	+29%
	May-12	**May-13**	**% point change**
Most used communication service (% of total population)			
Mobile phone voice calls	26%	29%	+3
Texting from a mobile phone	22%	24%	+2
Home fixed-line telephone	22%	16%	−6
	Jun-12	**Jun-13**	**% change**
Total internet service subscribers[‡]	28.23 m	32.00 m	+13%
Internet subscribers by technology type			
Mobile phone handset internet	16.19 m	19.65 m	+21%
Mobile wireless broadband (e.g., dongle/datacard services)	5.86 m	6.15 m	+5%
ADSL	4.63 m	4.79 m	+3%
Cable	0.917 m	0.934 m	+2%
Dial-up	0.439 m	0.227 m	−48%
Satellite	0.094 m	0.093 m	−1%
Fibre	0.052 m	0.115 m	+121%
Fixed wireless[#]	0.030 m	0.049 m	+63%
Other	0.010 m	0.003 m	−70%

m=million.
*Sum of mobile phone handset and mobile wireless broadband subscribers.
[†]Includes PSTN and other fixed-line telephone services.
[§]Estimates relates to people aged 18 years and over.
[#]Fixed wireless, for example WiMAX, uses an air interface to connect an internet service. An antenna installed at the customer's premises receives signals from the service provider's base station.
[‡]Including mobile phone handset and mobile wireless broadband subscribers.
Note: Counts of subscribers published prior in previous communications reports may vary due to ABS revisions.

Regulated or contracted services

	Jun-12	Jun-13	% change
Payphones (Telstra-operated and privately owned)	31,032	29,523	−5%
Number of telephone services covered by the CSG Standard	7.12 m	6.68 m	−6%
CSP customers who have waived their rights under the CSG	0.228 m	0.248 m	+9%
Number of CSG compensation payments made*	0.166 m	0.175 m	+5%
Value of CSG compensation payments made*	$5.77 m	$7.89 m	+37%
Number of priority assistance customers	0.222 m	0.257 m	+16%
NRS call minutes relayed (financial year ending)	2.97 m	3.06 m	+3%

m=million.
*Relates to the number and value of compensation payments made by CSPs to customers occurring during the financial year.

Communication network and service providers

	Jun-12	Jun-13	% change
Members of the TIO scheme	1,221	1,360	+11%
Total number of ISPs	81	77	−5%
Medium ISPs (1,001–10,000 subscribers)	49	51	+4%
Large ISPs (10,001–100,000 subscribers)	24	17	−29%
Very large ISPs (100,001 or more subscribers)	8	9	+13%

Digital economy

Digital economy infrastructure

	30 June 2012	30 June 2013
4G mobile networks		
Network rollout		
Telstra	40% of population covered	66% of population covered
Optus	Coverage in Sydney, Melbourne, Perth, Adelaide, Brisbane, Byron Bay, Coffs Harbour and Gold Coast. Network went live in Canberra on May 2013.	
VHA	Launched its network in major metropolitan areas in June 2013 and opened the service to new customers on 10 July 2013.	
4G services in operation		
Telstra	0.38 m	2.80 m
Optus	0.001 m	1.08 m
NBN		
Premises passed/covered		
Fibre brownfields premises*	28,860	163,515
Fibre greenfields lots or premises	10,054	44,028
Fixed wireless & satellite premises	173,885	277,256
Premises activated		
Fibre brownfields premises	3,364	20,441
Fibre greenfields lots or premises	503	13,145
Fixed wireless & satellite premises	9,669	36,514

*Includes Service Class 0 premises which were in the footprint of the NBN Fibre Network but not currently NBN serviceable for the purposes of the NBN Co fibre access service as at 30 June 2013.

Volume of data downloaded

	Quarter ending June 2012	Quarter ending June 2013	% change
Fixed-line broadband*	389,130 TB	629,964 TB	+62%
Wireless broadband†	25,301 TB	27,232 TB	+8%
Mobile handset internet	9,943 TB	19,636 TB	+97%
Total volume of data downloaded	**424,480 TB**	**676,898 TB**	**+59%**
Average volume of data downloaded per subscriber fixed-line broadband subscribers	69.5 GB	107.9 GB	+55%
Average volume of data downloaded per wireless broadband subscriber	4.2 GB	4.3 GB	+2%
Average volume of data downloaded per mobile phone handset internet subscriber	0.61 GB	1.0 GB	+64%

TB=terabyte. GB=gigabyte.
*ADSL, cable, fibre and other fixed-line broadband.
†Includes satellite, fixed wireless, mobile wireless via a datacard, dongle or USB modem and other wireless broadband. Excludes subscriptions via mobile handsets.
Note: ABS has revised its estimates for volume of data downloaded by mobile handset internet subscribers for the June 2012 quarter published in previous ACMA reports.

Professionally produced online content services

	May-12	May-13	% change
Total population aged 18 years and over Accessed professionally produced online video content services in the six months to:	5.16 m	7.86 m	+52%
Catch-up television service	n/a	6.69 m	n/a
Video on demand service	n/a	1.94 m	n/a
Commercial internet television service (e.g. IPTV)	n/a	1.38 m	n/a
Accessed online news sites	n/a	11.39 m	n/a
Paid for an online news subscription	n/a	1.08 m	n/a
	Jun-12	**Jun-13**	**2012 % change**
People with access to time shifting content devices in the home (PVR/DVR)	4.86 m	5.20 m	+7%

m=million. n/a=not available. PVR=personal video recorder. DVR=digital video recorder.

Online participation by Australians

	Jun-12	Jun-13	% change 2012–13
Total population aged 18 years and over			
Connectivity			
Have an internet connection at home	13.97 m	14.24 m	+2%
Have a broadband connection at home	12.25 m	13.15 m	+7%
Have accessed internet via mobile phone during	5.62 m	7.50 m	+33%
Number of '.au' domain name registrations at June[‡]	2.44 m	2.67 m	+9%
Capability[†]			
Used the internet more than once a day	10.09 m	10.81 m	+7%
Online activities recording the highest percentage growth			
Downloading video or audio content	6.98 m	7.92 m	+13%
Streaming video or audio content	8.28 m	9.26 m	+12%
Used social networking sites such as Facebook	9.42 m	10.04 m	+7%
Banking or paying bills online	11.65 m	12.86 m	+10%
Use of cloud services in the six months to May	12.57 m	14.00 m	+11%
Downloading of mobile applications in the six months to May	n/a	13.08 m	n/a
Confidence			
People using the internet to work away from the office[†]	n/a	5.64 m	n/a
Internet users performing five or more separate activities online during June	39%	43%	+4 percentage points change
	2011	**2012**	**% change**
Value of internet commerce ($A) during the financial year ending June[§]	$189 b	$237 b	+25%

m=million. b=billion. n/a=not available. GB=Gigabytes.
[‡]*Excludes domain names registered under '.gov.au'.*
[†]*Relates to activities undertaken in the six months to May.*
[§]*ABS defines internet e-commerce as the purchase/order of goods and services online regardless of whether or not the purchases were paid for online. Latest ABS available data refers to period 2011–12.*

Licensed services

Apparatus licences

	30 June 2012	30 June 2013
Aeronautical	2,106	2,221
Aircraft	11	12
Amateur	15,760	15,540
Broadcasting	10,091	9,285
Defence	74	76
Earth	579	688
Earth receive	581	674
Fixed	44,140	41,093
Fixed receive	1,012	1,007
Land mobile	68,905	69,287
Major coast receive	17	17
Maritime coast	3,504	3,545
Maritime ship	7,884	7,664
Outpost	4,106	3,889
Public telecommunications service	657	691
Radiodetermination	2,899	2,923
Scientific	504	497
Space	102	106
Space receive	338	301
Total	**163,270**	**159,516**

Note: Figures include multi-year licences.

Broadcasting licences

Licence type	30 June 2012	30 June 2013
Commercial radio broadcasting licences	273	273
Community radio broadcasting licences	362	355
Temporary community radio broadcasting licences	96	95
Commercial television broadcasting licences	69	73
Community television broadcasting licences*	81	69
Subscription television broadcasting licences†	2,719	2,737

*Relates mostly to Indigenous television services.
†Each subscription service is licensed separately.
Note: The decrease in community radio and television licences reflects the number of Indigenous broadcasting licences that lapsed and were not renewed during 2012–13.

Telecommunications licences

Licence type	30 June 2012	30 June 2013
Licensed carriers	187	201
Licensed or registered cablers	67,637	69,155

Number portability and allocations

Number portability

	2011–12	2012–13	% change
Local geographic numbers ported	627,160	763,422	+22%
Mobile numbers ported	2,627,350	1,743,485	−34%

Quantity of numbers allocated by number type

Type of number	2011–12	2012–13
Geographic	2,664,600	1,779,700
Digital mobile	6,400,000	2,910,000
Mobile network codes	4	4
Mobile number codes	n/a	n/a
International signalling point codes	n/a	1
LICS*	7,000	10,000

n/a=not available.
**Location Independent Communications Service.*

National interest matters

Integrated Public Number Database (IPND)

	2011–12	2012–13	% change
Number of connected records on the IPND	62.05 m	64.12 m	+3%

m=million.

Call volumes to emergency call service numbers Triple Zero and 112

Year	2008–09	2009–10	2010–11	2011–12	2012–13
Total number of calls offered	10,301,011	8,833,683	8,867,191	9,429,595	8,854,728
Total number of calls answered	93.1%	95.4%	95.8%	96.0%	96.0%

Note: Calls offered refers to the number of calls waiting (at time zero) at the instant the four-second Recorded Voice Announcement (RVA) finished.

Cost to carriers and CSPs of maintaining interception capabilities

2011–12	2012–13	% change
$16,841,846	$18,398,731	+9%

Disclosures of customer information by carriers and CSPs

2011–12	2012–13	% change
697,431	685,727	–2%

Telecommunications and broadcasting service complaints and investigations

TIO complaint statistics

	2011–12	2012–13	% change
New complaints	193,702	158,652	–18%
Complaint issue category			
Customer service	109,502	94,639	–14%
Billing and payments	93,941	78,160	–17%
Faults	78,829	75,325	–4%
Complaints-handling	65,818	50,504	–23%
Credit management	52,907	46,138	–13%

Source: TIO.

Telemarketing investigations

	2011–12	2012–13	% change
Complaints received	21,969	19,677	–10%

Number of broadcasting complaints and investigations*

	2008–09	2009–10	2010–11	2011–12	2012–13
Written enquiries and complaints	1,464	1,676	1,512	2,273	2,178[§]
Investigations completed	194	189	197	231	212
Investigations resulting in a breach finding*	80	74	72	71	67
Investigations resulting in a non-breach finding*	109	111	115	155	135

[§]This does not include 2,680 complaints and enquiries received about 2DAY's Summer 30 program broadcast on 4 December 2012.
*Investigations against a code of practice, licence condition, standard and/or provision of the Broadcasting Services Act 1992.
Sum of categories does not equal total number of investigations completed due to exclusion of completed investigations with no finding; for example, where the complaint is withdrawn.

Internet content investigations

	2008–09	2009–10	2010–11	2011–12	2012–13
Complaints received	1,182	3,212	4,865	5,026	4,633
Investigations leading to finding of prohibited content	618	1,328	1,338	2,011	1,853
Items actioned (hosted in Australia)	7	25	12	7	8*
Items actioned (overseas-hosted)	1,356	1,907	1,945	2,004	1,845

Three items of content were removed upon referral to law enforcement prior to any take-down notices being issued by the ACMA.

Spam reports

	2011–12	2012–13	% change
Number of complaints, reports and enquiries to the ACMA about spam	226,816	412,743	+82%

Note: Since the ACMA introduced a new reporting method in 2011, the number of contacts from members of public in relation to spam has increased dramatically. This reflects an increase in e-marketing by businesses, increased awareness of the ACMA's role in spam regulation and the provision of more accessible and simple channels for the public to report spam.

Digital television

Households that had converted their main TV set to digital television

	June 2012	June 2013
	82%	98%

Source: DBCDE, Digital Tracker Summary Report Quarter 2 April to June 2013.

Financial information

Radiocommunications apparatus licences revenue raised by the ACMA

Type of licence	2011–12 $million	2012–13 $million
Assigned licences		
Public telecommunications service	56.25	55.86
Fixed	55.19	56.53
Land mobile	18..40	21.25
Satellite*	6.52	4.46
Defence	10.22	10.85
Other	1.23	3.12
Total assigned licences	**147.82**	**152.07**
Non-assigned licences	1.24	1.63
Total	**149.06**	**153.70**

Includes Earth, space, Earth receive and space receive licences.

Select revenue raised by the ACMA

	2011–12 $million	2012–13 $million
Spectrum auctions/reissue	1.78	1,481.65*
Apparatus auctions	0.04	0.06
Apparatus licence tax	146.05	118.99§
Telephone numbering revenue		
Revenue from numbering auctions	1.74	1.66
Revenue from annual numbering charge	60.00	60.00
Broadcasting licence fees and datacasting charge	231.19	167.39†

Does not include revenue obtained from the digital dividend spectrum auctions.
§*Excludes pre-paid amounts covering licensing periods outside the financial year.*
†*The decline in revenue is a result of a reduction in the broadcasting licence renewal fee.*

Telecommunications revenue

	2008–09	2009–10	2010–11	2011–12	2012–13
Total eligible revenue of carriers	$28.1 b	$28.6 b	$28.8 b	$28.6 b	n/a
Annual carrier licence charge	$36.21 m	$39.55 m	$37.70 m	$38.05 m	$38.89 m

b=billion. m=million.
n/a=not available. This data is not available until 2013–14.

Chapter 1
The Australian communications and media market

Overview

Chapter 1 examines the major developments in the availability and use of communications and media services in Australia including service provider offerings, provision and take-up of services, and communications infrastructure developments. Growth in the digital economy continues to be a major catalyst for change in the Australian communications and media market, providing both new growth opportunities and challenges for traditional revenue streams. Key developments during 2012–13 confirmed the ongoing role of the internet in driving the development of the digital economy and transformation of communications and media services including:

> reduced dependency on fixed-voice communications and growth in use of multiple online and IP communications services with mobile phone services pre-eminent

> significant increases in the number of users of OTT communications such as VoIP via mobile phones and tablets, providing a growing challenge to fixed and mobile voice revenue streams

> continued growth in use of smart devices such as smartphones and tablets and related applications and services

> internet services delivered over mobile networks, providing ongoing growth opportunities in the internet access market

> growth in the delivery and use of content services across multiple networks and consumer devices

> surge in the volume of data being downloaded in Australia, driven by fixed-line broadband subscribers

> increased use of professionally produced online content services such as catch-up TV, complementing viewing of traditional broadcast services

> the expansion of key digital economy infrastructure such as 4G mobile networks and the NBN

> ongoing attempts to monetise growth in online participation as evidenced by the development of pay-per-view business models for select online content and news services and growth in online advertising.

Fixed-line service availability

Number of services in operation

There were 10.32 million fixed-line telephone services in operation at June 2013 compared to 10.44 million services at June 2012, a net decline of around one per cent for the second year in a row. Telstra accounted for 75 per cent of all fixed-line telephone services at June 2013.

The number of Telstra's fixed-line telephone services in operation declined by 3.6 per cent during 2012–13 (285,000 services) similar to declines seen during 2011–12 (Table 1.1). Telstra also reported a 9.5 per cent reduction ($460 million) in its Public Switched Telecommunications Network (PSTN) product revenue during 2012–13, compared to a fall of $538 million during 2011–12.[1]

Table 1.1 Number of fixed-line telephone services in operation*

All CSPs	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	% change 2012–13
Retail	9.17 m	9.12 m	9.15 m	9.01 m	8.79 m	−2.4%
Wholesale	1.50 m	1.47 m	1.39 m	1.43 m	1.53 m	+7.0%
Total	**10.67 m**	**10.59 m**	**10.54 m**	**10.44 m**	**10.32 m**	**−1.1%**

Telstra services only	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	% change 2012–13
Retail	7.73 m	7.41 m	7.16 m	6.88 m	6.53 m	−5.0%
Wholesale	1.29 m	1.25 m	1.21 m	1.18 m	1.24 m	+5.0%
Total	**9.02 m**	**8.66 m**	**8.37 m**	**8.06 m**	**7.77 m**	**−3.6%**

m=million.
*Includes PSTN and other fixed-line telephone services such as VoIP (using a VoIP handset).
Note: Retail refers to residential and business services provided on the carriers' or CSPs' own network. Wholesale relates to services provided for resale.
Source: ACMA annual industry data request.

The continued shift from fixed-line telephony

The decrease in fixed-line voice services in operation and related revenue continues to reflect the changing patterns of communications use in Australia. This has been driven by a number of key trends, which include:

> continued growth in the number of mobile phone users without a fixed-line voice service in the home

> diversification in communications services used and a related decline in consumers identifying fixed-line voice as their most used communications service

> growth in use of OTT communications services such as mobile VoIP.

Growth in mobile phone only consumers
At June 2013, 3.68 million Australians aged 18 years and over—21 per cent of the total adult population—were estimated to be without a fixed-line telephone service in the home, an increase of 18 per cent since June 2012 (Figure 1.1). The majority of these people (59 per cent) were aged 18–34.

Figure 1.1 Growth in population with a mobile phone and no fixed-line telephone
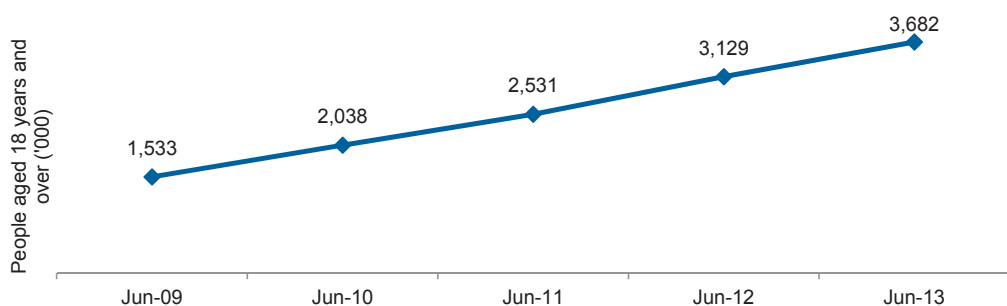
Source: Roy Morgan Single Source.

Diversification in communications services used

The ACMA's consumer research reveals that there is growing diversity in the communications services used by Australians. However, mobile communications, particularly with the advent of smartphones, continue to be at the forefront of consumer communication activity (Figure 1.2).

Figure 1.2 Communications services used in the six months
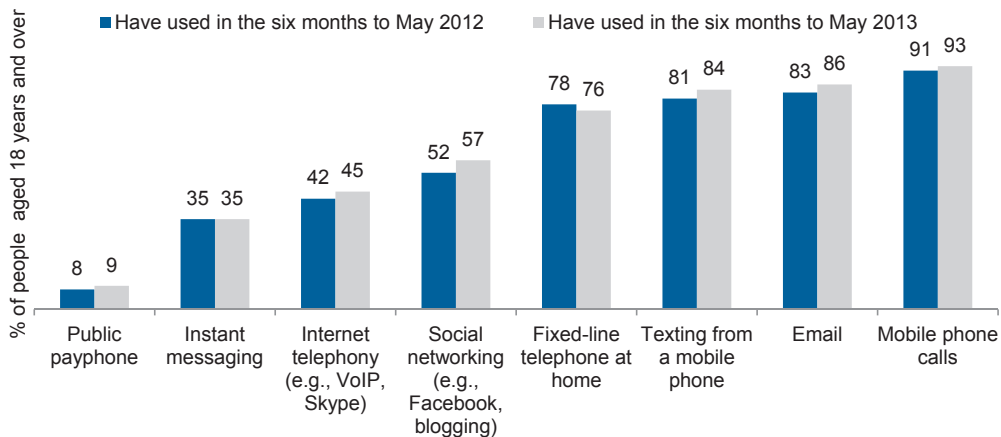
Base: People with a fixed-line telephone and/or a mobile telephone.
Note: Multiple responses allowed.
Source: ACMA-commissioned surveys.

Complementary use of communications services

The majority of Australians do not use individual communications services exclusively, preferring instead to mix and match services to suit specific needs and circumstances (Figure 1.3).

The complementary nature of communications use is reflected in the 62 per cent of communication consumers who used five or more separate communications services in the six months to May 2013. This compared to 18 per cent having used four, nine per cent three, seven per cent two services and only four per cent one service.

The number of communications services used generally decreases with age. Sixty-three per cent of people aged 18–24 used six or more communications services in the six months to May 2013 compared to only 13 per cent for people aged 65 years and over.

Figure 1.3 Number of communications services used in the six months to May 2013
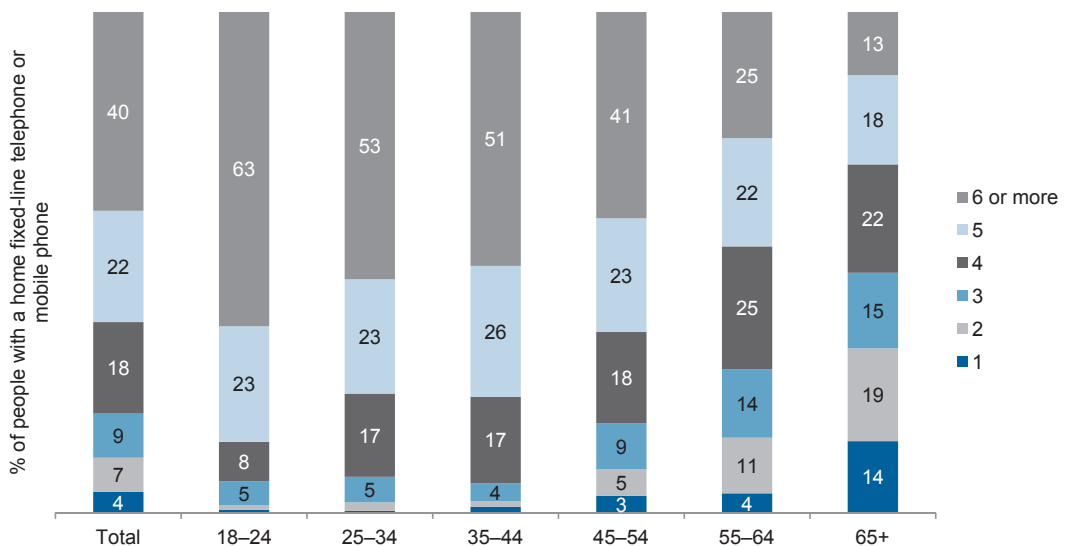
Note: Percentages ≤2 are not marked in this figure.
Source: ACMA-commissioned surveys.

Main communications service used

The dominance of mobile voice and texting communications is further demonstrated when examining the communications service most used by Australians. In the six months to May 2013:[2]

> 29 per cent of adults identified mobile voice calls as their most used communications service, up from 26 per cent at May 2012

> 24 per cent texting, up from 22 per cent

> 20 per cent email, no change

> 16 per cent fixed-line telephone calls, down from 22 per cent

> nine per cent social networking, up from seven per cent

> two per cent other services such as instant messaging and OTT VoIP, unchanged from May 2012.

Across all age groups, with the exception of people aged 65 years and over, mobile text and voice were the most used communications services in the six months to May 2013.

Growth in use of OTT VoIP services

OTT communications—communications accessed via the internet rather than a carrier's or CSP's own dedicated, managed network[3]—are increasingly affecting traditional communications revenues.

Globally, the rise of OTT VoIP services is identified as a major threat to established voice revenue streams with some estimates placing the global loss in voice revenues as a result of the growth in use of OTT communications at $36.5 billion per year.[4]

During 2012–13, the number of VoIP users in Australia increased by six per cent or 251,000 to reach 4.59 million people aged 18 years and over. The growth in VoIP users during this period was considerably lower than the 21 per cent recorded during

2011–12 (Figure 1.4). Key developments relating to the take-up of VoIP services during 2012–13 included:

> strong growth in the use of mobile phone and tablet OTT VoIP services (increasing by 73 per cent and 150 per cent respectively)

> minimal growth in the use of OTT VoIP via computers/laptops

> a decline in the use of internet phones or voice box/adaptors.

The dramatic growth in use of OTT VoIP via mobile phones has paralleled the rapid uptake of smartphones and the increased availability of mobile applications designed to facilitate the use of internet-based services via mobiles.[5]

Figure 1.4 Take-up of VoIP services by household consumers
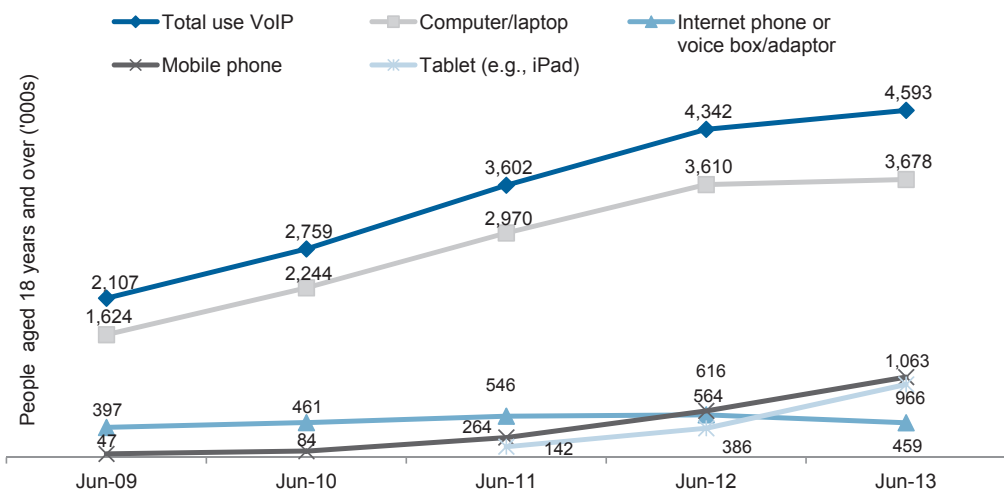
Source: Roy Morgan Single Source.

International comparisons—communications services
The shift from fixed-line telephones is also evident in other countries:

> 70 per cent of households in European Union (EU) countries had a fixed-line telephone at March 2013, down slightly by one percentage point from the previous year[6]

> 84 per cent of households in the UK had a fixed-line telephone at March 2013 (no change from last year) with 15 per cent of the population having a mobile phone and no home fixed-line telephone[7]

> 91 per cent of the population in the US owned a mobile phone (up by four percentage points) and the in UK, 94 per cent (no change from the previous year).[8]

Mobile service availability

Number of services in operation
At June 2013, there were an estimated 31.09 million mobile voice and data services in operation in Australia. This is a growth of three per cent—the same result recorded for the 2011–12 period (Table 1.2)—suggesting that the Australian mobile market is nearing saturation. The average growth rate prior to the previous two years was 12 per cent.

Table 1.2 Mobile services in operation

|	Jun-11	Jun-12	Jun-13	% change from Jun-12 to Jun-13
Prepaid	11.23 m	11.64 m	11.98 m	+2.9%
Post-paid	18.05 m	18.56 m	19.10 m	+2.9%
Total	**29.28 m**	**30.20 m**	**31.09 m**	**+2.9%**

m=million.
Note: Figures include wholesale and retail services and wireless broadband data services provided via data cards, dongles or USB modems.
Source: The ACMA annual industry data request.

During 2012–13, mobile network owners continued to face intense competition, particularly for market share. Telstra's share of mobile services in operation increased by three percentage points, resulting in its share of the mobile services market reaching 49 per cent. In comparison, Optus' market share remained unchanged at 31 per cent while VHA's share of mobile services declined by three percentage points to reach 20 per cent at June 2013 (Figure 1.5).

Figure 1.5 Carrier share of mobile services in operation, June 2013
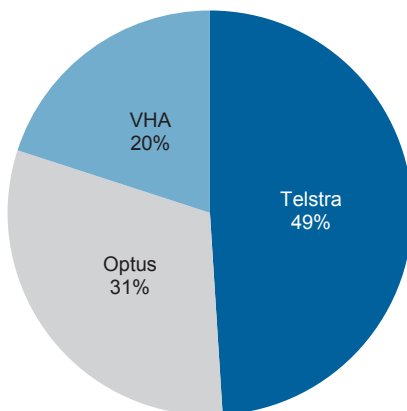
Note: Figures include wholesale and retail services and wireless broadband data services provided via mobile handset, data cards, dongles or USB modems.
Source: ACMA annual industry data request.

In terms of the performance of Australia's three mobile network owners, a number of significant developments occurred during 2012–13:

> All mobile network owners continued to roll out their 4G networks, with significant increases in coverage. At June 2013:
>> Telstra's 4G network covered 66 per cent of the population, up from 40 per cent from the previous year
>> Optus' 4G network covered Sydney, Melbourne, Perth, Adelaide, Brisbane and the regional centres of Byron Bay, Coffs Harbour and the Gold Coast
>> VHA launched its 4G network in major metropolitan areas and opened the services to new customers on 10 July 2013.[9]
> The take-up of 4G mobile services has increased significantly over 2012–13:
>> Telstra reported 2.80 million 4G services at June 2013, up from 380,000[10]
>> Optus reported 1.08 million 4G services at June 2013.[11]

> In addition, Telstra, Optus and TPG made significant investments in spectrum assets during the period. On 7 May 2013, the ACMA announced the outcomes from the digital dividend spectrum auctions including the purchase by:

  > Optus Mobile of 20 MHz in the 700 MHz band and 40 MHz in the 2.5 GHz band

  > Telstra of 40 MHz in the 700 MHz band and 80 MHz in the 2.5 GHz band

  > TPG Internet of 20 MHz in the 2.5 GHz band.[12]

Mobile-internet services

Growth in mobile services continues to be driven by take-up of mobile internet (using mobile phone handset internet, dongle, datacard or USB modem services). Mobile handset and mobile wireless internet subscribers collectively account for 83 per cent of all mobile services in operation at June 2013.[13]

The latest data from the Australian Bureau of Statistics (ABS) shows that at June 2013, there were 6.15 million mobile wireless internet subscribers, an increase of five per cent, and a further 19.65 million mobile handset internet subscribers, an increase of 21 per cent since June 2012 (Figure 1.6).

Considering that growth in the total number of mobile voice and data services in Australia was only three per cent for the period 2012–13, the shift to smartphones with internet accessibility continues to be a major driver of growth in the mobile services market.

Figure 1.6 Mobile-internet subscribers in Australia
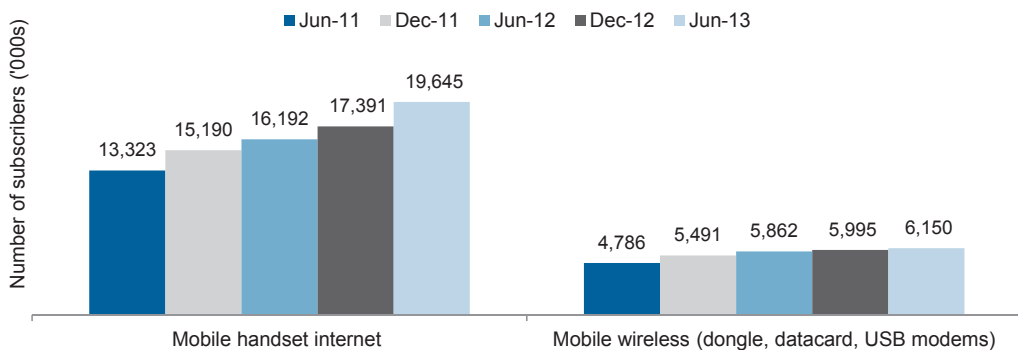
Note: ABS has revised some mobile handset internet subscriber figures published in previous ACMA reports.
Source: ABS, 8153.0-Internet Activity, Australia, June 2013.

ACMA research shows that 62 per cent of Australian adults (10.91 million people) had used the internet via their mobile handset during the six months to May 2013. This is a 19 per cent increase from the previous year where 52 per cent (9.19 million people) had used the internet via their mobile handset during the six months to May 2012. In addition, the availability of mobile applications and increased data allowances has further facilitated the use of internet services via mobile phones. At June 2013:

> 52 per cent of mobile phone users had downloaded an application during June 2013 compared to 50 per cent during June 2012

> of those mobile phone users with a data allowance, 54 per cent had a monthly allowance of one gigabyte or more, compared to 52 per cent at June 2012.[14]

Growth in use of the internet via mobile phone handsets has been facilitated by the availability of smartphones. Sixty-four per cent of adults (11.19 million people) were estimated to be using a smartphone at May 2013 compared to 49 per cent (8.67 million) at May 2012, an increase of 29 per cent (Figure 1.7). Smartphone adoption was highest for people aged 18–24 at 89 per cent.

Figure 1.7 Take-up of internet-enabled mobile phones
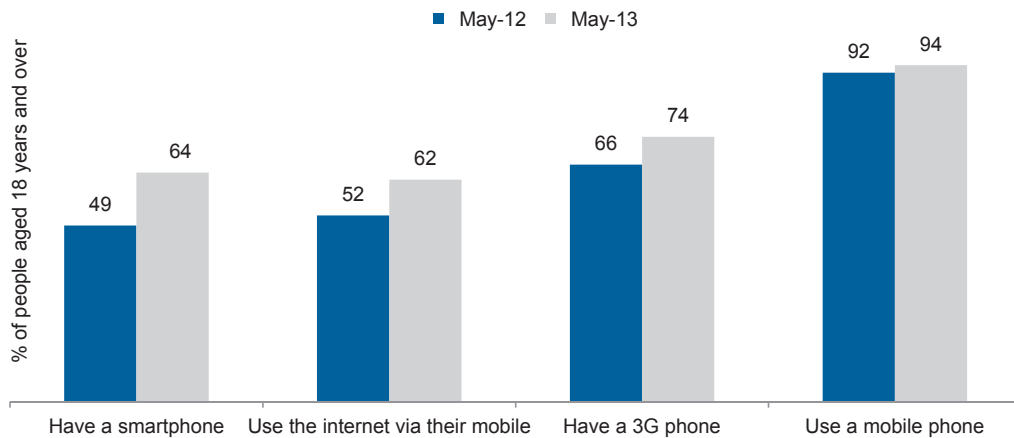
Base: *People with a fixed-line telephone and/or a mobile telephone.*
Note: *Data is at May 2012 and May 2013 with the exception of mobile phone internet use which relates to use in the six months to May in 2012 and 2013. A smartphone is a mobile phone built on a mobile operating system, with advanced computing capability and connectivity. Examples of smartphones include Apple iPhone, Android phones such as HTC Desire and Samsung Galaxy, Windows mobile phones such as the Nokia Lumia 800 and HTC Mozart and Blackberries.*
Source: *ACMA-commissioned survey.*

Internet service availability

Number of Internet Service Providers

At June 2013 there were 419 Internet Service Providers (ISPs) operating in Australia. The distribution of ISPs by number of internet subscribers was:

> 215 with 1–100 subscribers (data for June 2012 not available)
> 127 with 101–1,000 subscribers (data for June 2012 not available)
> 51 with 1,001–10,000 subscribers, up from 49 at June 2012
> 17 with 10,001–100,000 subscribers, down from 24 at June 2012
> nine with 100,001 or more subscribers, up from eight at June 2012.[15]

In 2012–13, there was significantly less activity relating to ISP acquisitions and mergers in comparison to previous years. The only major ISP acquisitions of note were made by the M2 Group. Following on from its purchase of iPrimus in June 2012, the M2 Group purchased DoDo and Eftel.

Table 1.3 provides a snapshot of the internet services in operation (SIOs) for the top five ISPs in the Australian market—Telstra, Optus, iiNet, TPG and M2.

Table 1.3 SIOs for key Australian ISPs at June 2013

	('000)	Internet SIO
Telstra	4,826	Total fixed internet subscribers
	2,772	Fixed-broadband retail
	769	Fixed-broadband wholesale
	1,285	ISDN access (basic line equivalents)
	3,570	Mobile broadband (data card)
Optus	1,011	Total fixed internet subscribers
	986	On-net broadband customers*
	13	Off-net
	12	Dial-up
iiNet	840	Total fixed internet subscribers
	549	On-net
	271	Off-net
	20	NBN + Fibre
	108	Mobile
TPG	671	Total broadband subscribers
	351	On-net bundle
	236	On-net standalone
	84	Off-net
M2 Group	412	Total fixed-broadband subscribers
	350	Consumer subscribers
	38	Business subscribers
	25	Wholesale

Optus on-net includes HFC, ULL and business grade broadband customers.
Note: Includes re-sale figures. Terminology used is consistent with that used in company annual reports. The number of subscribers is measured using the number of subscriber lines rather than number of users. Subscribers may have multiple accounts with more than one ISP. Numbers presented in the table also includes SIO of subsidiaries. Numbers may not add up due to rounding.
Source: Company annual reports.

Number of internet subscribers

There has been continued growth in the number of internet subscribers (driven by take-up of mobile internet and NBN-related services (Table 1.4)).

Fixed internet subscribers (19 per cent of all internet subscribers) increased by one per cent in the twelve months to June 2013 to reach 6.11 million subscribers, with:

> fixed wireless subscribers up 63 per cent (from 30,000 to 49,000)

> fibre subscribers up 121 per cent (from 52,000 to 115,000)

> ADSL subscribers up three per cent (from 4.63 million to 4.79 million)

> cable subscribers up two per cent (from 917,000 to 934,000)

> dial-up continuing to decrease, down 48 per cent.

Mobile handset and wireless internet subscribers (81 per cent of all internet subscribers) increased by 17 per cent over the 12 months June 2013, with:

> mobile handset internet subscribers up 21 per cent

> mobile wireless (dongle, datacard and USB modem service subscribers) up five per cent.

Table 1.4 Internet subscribers by technology type

Internet subscribers by access technology	Dec-11 ('000)	Jun-12 ('000)	Dec-12 ('000)	Jun-13 ('000)	% change from Jun-12 to Jun-13
Mobile wireless (dongle, data card, USB modem services)	5,491	5,862	5,995	6,150	+5
ADSL	4,553	4,632	4,727	4,787	+3
Cable	900	917	918	934	+2
Dial-up	473	439	282	227	−48
Satellite	100	94	92	93	−1
Fixed wireless*	35	30	49	49	+63
Fibre	37	52	91	115	+121
Other	8	10	7	3	−70
Total (excluding mobile handset subscribers)	11,596	12,036	12,161	12,358	+3
Mobile handset	15,190	16,192	17,391	19,645	+21
Total (including mobile handsets)	26,786	28,228	29,552	32,003	+13

*Fixed wireless, for example WiMAX, uses an air interface to connect an internet service. An antenna installed at the customer's premises receives signals from the service provider's base station.
Note: ABS subscriber statistics measure the number of 'subscriber lines' rather than the number of 'users'. Counts of subscribers are not the same as counts of people/organisations with internet access as some subscribers may have accounts with more than one ISP or multiple accounts with a single ISP. Relates to ISPs with more than 1,000 subscribers.
Source: ABS, 8153.0-Internet activity, Australia, June 2013.

International comparisons—fixed versus mobile broadband penetration

While Australia is one of the leaders in terms of mobile broadband penetration, it has a lower level of fixed broadband in comparison to other countries. Research by the Broadband Commission for Digital Development shows that in 2012, out of 189 countries, Australia was ranked:

> 29th in terms of fixed-line broadband penetration per 100 inhabitants

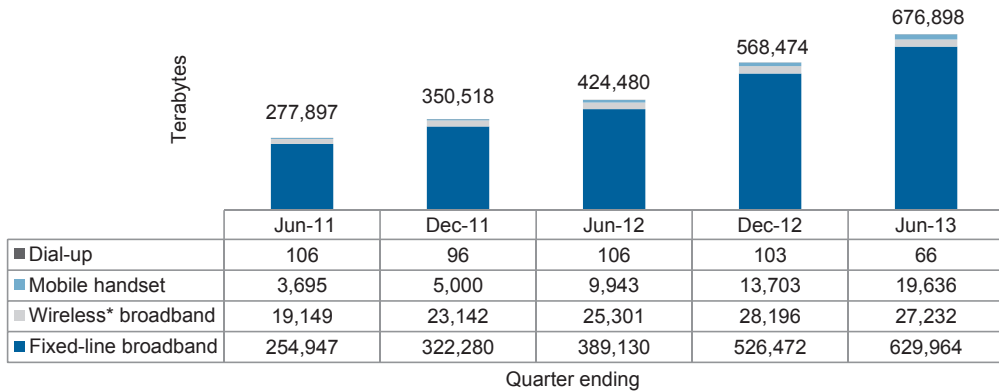> sixth in terms of mobile broadband penetration per 100 inhabitants.[16]

Volume of data downloaded

Despite the numerical superiority of mobile-internet subscribers (mobile wireless and mobile handset) and the relatively strong growth in these services historically, fixed-line broadband subscribers continued to drive growth in the volume of data downloaded (Figure 1.8) with 95 per cent of the growth in data downloads during the June quarter 2013 attributed to fixed-line broadband subscribers. The total volume of data downloaded in Australia during the June quarter of 2013 was 59 per cent higher in comparison to the volume of data downloaded during the June quarter of 2012. During this period, the volume of data downloaded over:

> fixed-line broadband increased by 62 per cent

> mobile handsets increased by 97 per cent

> wireless broadband increased by eight per cent.

Figure 1.8 Volume of data downloaded by Australian internet users

|	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
■ Dial-up	106	96	106	103	66
■ Mobile handset	3,695	5,000	9,943	13,703	19,636
■ Wireless* broadband	19,149	23,142	25,301	28,196	27,232
■ Fixed-line broadband	254,947	322,280	389,130	526,472	629,964

Quarter ending

*Excludes downloads via mobile phone handsets. Includes dongle, USB modems, datacard services, satellite, etc.
Note: Total volume of data downloaded is based on ABS published numbers and components may not add up due to rounding. ABS reports that 'download data presented should only be considered an indicative measure of internet activity during the reference period.'
Source: ABS, 8153.0-Internet Activity, June 2013.

Fixed-line broadband versus mobile internet

In terms of the average amount of data downloaded, fixed-line broadband subscribers are more likely to be heavy users of high-bandwidth services such as video streaming than their wireless counterparts (Figure 1.9). During the June quarter of 2013, the average amount of data downloaded by a fixed-line broadband subscriber was approximately 25 times greater than the average amount of data downloaded by a wireless-broadband subscriber and 108 times that of a mobile-handset internet subscriber.

Figure 1.9 Average volume of data downloaded per subscriber by type of technology
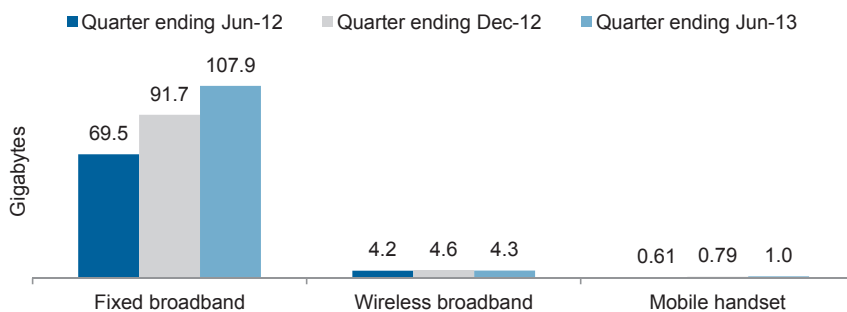
Note: Fixed line includes ADSL, cable, fibre and other fixed line broadband. Wireless includes satellite, fixed wireless, mobile wireless via a datacard, dongle, USB modem or tablet SIM card and other wireless broadband. ABS has revised volume of data downloaded by mobile handset internet subscribers as published in previous ACMA reports.
Source: ABS, 8153.0-Internet activity, Australia, June 2013.

Although the average volume of data downloaded per subscriber by mobile handsets is minimal compared to fixed-line broadband downloads, it rose from 0.61 to 1.0 gigabytes from the quarter ending June 2012 to the quarter ending June 2013. This is expected to continue to increase as a greater number of consumers transition to smartphones, more mobile applications are developed facilitating access to services online via mobile phones and more consumers become comfortable using mobile-internet services.

Diversification of consumer internet access devices

At June 2013, approximately 80 per cent of adults resided in a household with internet access, while 74 per cent of adults were estimated to have broadband internet in the home.[17]

Australians with household internet access go online from home via a range of consumer devices (Figure 1.10). Although laptop and desktop computers have remained the most dominant devices to access the internet, other consumer technologies are emerging within the home environment. During the 12 months to May 2013, Australians have significantly increased their use of portable internet devices such as mobile phones and tablet computers with take-up of these devices increasing by six percentage points and 18 percentage points, respectively. However, many Australian internet users access the internet via multiple devices, an indication of the complementary nature of internet access.

Figure 1.10 Internet take-up and devices used to access the internet from home
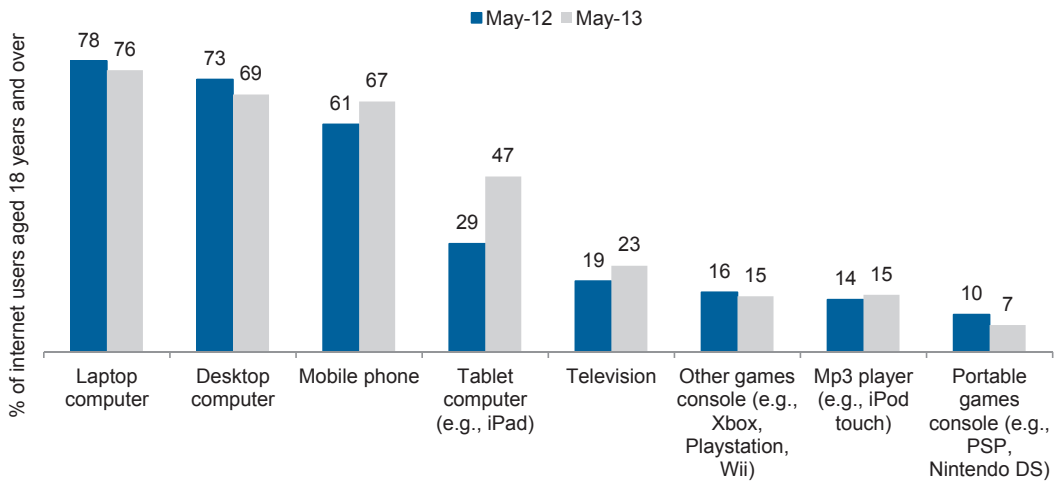
Base: People with a fixed-line telephone and/or a mobile telephone with household internet access.
*Note: Multiple responses allowed.*
Source: ACMA-commissioned surveys.

Complementary use of internet access devices

In the six months to May 2013, 62 per cent of internet users accessed the internet via three or more devices, compared to 20 per cent using two devices and 18 per cent using one device (Figure 1.11).

Age is a significant factor in the number of internet access devices used. Eighty-four per cent of internet users aged 18–24 years accessed the internet in the six months to May 2013 via three or more devices, compared to 27 per cent for people 65 years and over. Correspondingly, only three per cent of internet users aged 18–24 used one internet access device compared to 44 per cent for people aged 65 years and over.

Figure 1.11 Number of devices used to access the internet in the six months to May 2013
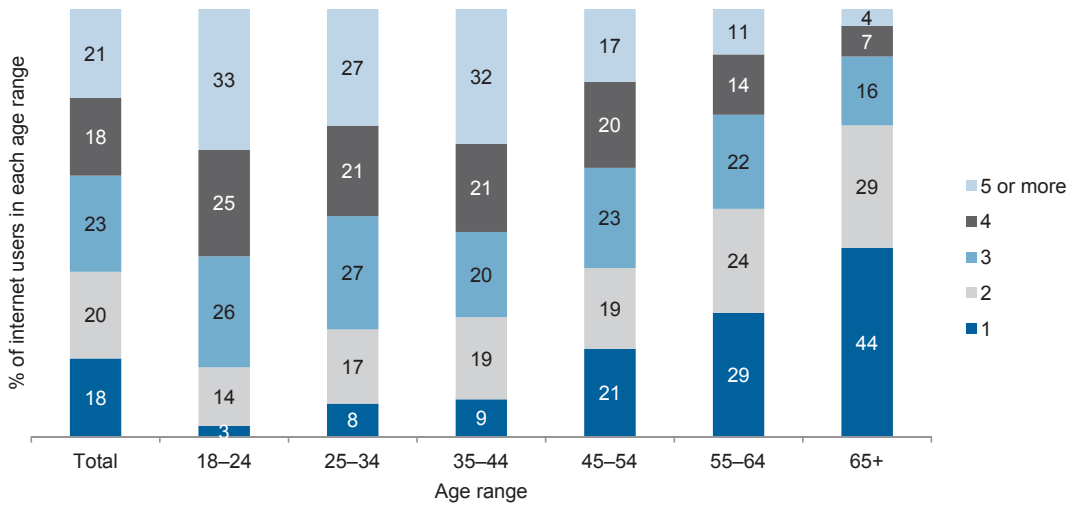
Source: ACMA-commissioned surveys.

International comparisons—internet access devices

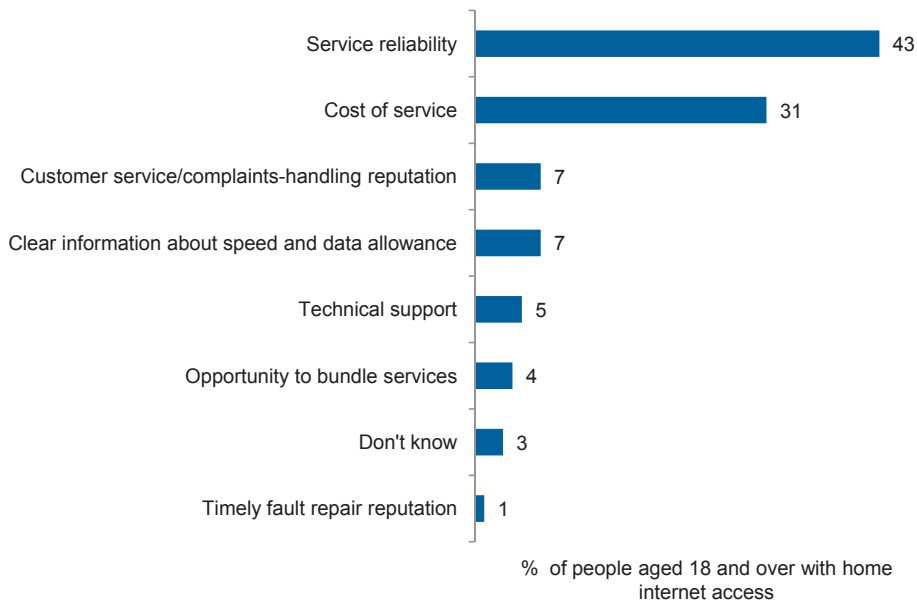The trend towards using multiple devices is evident in other countries with:

> smartphone ownership up by 10 percentage points to 56 per cent in the USA, and 12 percentage points to 51 per cent in the UK

> tablet ownership up by 16 percentage points to 34 per cent in the USA, and 13 percentage points to 24 per cent in the UK.[18][19]

Consumer expectations of internet services

The importance of the internet to Australian consumers is reflected in the growth in numbers of internet users and increased frequency of online interactions (see Chapter 5 of this report—*Consumer benefits from participating in the digital economy*).

This is further reflected in the importance consumers place on internet service reliability when selecting a home ISP (Figure 1.12). Internet users identified internet service reliability (43 per cent) as more important that service costs (31 per cent).

Figure 1.12 Most important factor in selecting an ISP, May 2013

Figure 1.12 Most important factor in selecting an ISP, May 2013

Factor	Value
Service reliability	43
Cost of service	31
Customer service/complaints-handling reputation	7
Clear information about speed and data allowance	7
Technical support	5
Opportunity to bundle services	4
Don't know	3
Timely fault repair reputation	1

% of people aged 18 and over with home internet access

Note: Only one factor allowed.
Source: ACMA-commissioned survey.

Reasons for changing home ISP

Of the 1.2 million people estimated to have changed their home ISP in the 12 months to May 2013:

> 49 per cent did so because they were offered a cheaper service by another ISP

> 22 per cent wanted a faster internet service

> 17 per cent were dissatisfied with the service from the previous ISP

> 12 per cent because their previous internet service was not reliable

> 10 per cent because of an offer of a bundled service with other communications services.[20]

National Broadband Network

The NBN is a wholesale network built and operated by NBN Co, delivering high-speed broadband across Australia via optical fibre, fixed-wireless or satellite technologies in 2012–13. Table 1.5 provides an overview of premises passed/covered by the NBN and the number of premises with NBN services.

In relation to premises passed or covered at June 2013, NBN Co reported:

> 207,543 premises were passed by the NBN fibre network, compared to 38,914 premises passed at June 2012[21]

> 277,256 premises were covered by NBN fixed-wireless or satellite networks, compared with 173,885 premises covered at June 2012.

At June 2013, 70,100 premises had activated NBN services compared to 13,536 premises at June 2012.

Table 1.5 Total premises/lots passed/covered and premises activated

	at Jun-12	at Jun-13
Premises passed/covered		
Fibre brownfields premises*	28,860	163,515
Fibre greenfields lots or premises	10,054	44,028
Fixed wireless & satellite premises	173,885	277,256
Total	**212,799**	**484,799**
Premises activated		
Fibre brownfields premises	3,364	20,441
Fibre greenfields lots or premises	503	13,145
Fixed wireless & satellite premises	9,669	36,514
Total	**13,536**	**70,100**

*Includes Service Class 0 premises which were in the footprint of the NBN Fibre Network but not currently NBN serviceable for the purposes of the NBN Co fibre access service as at 30 June 2013.[22]
Source: NBN Co.
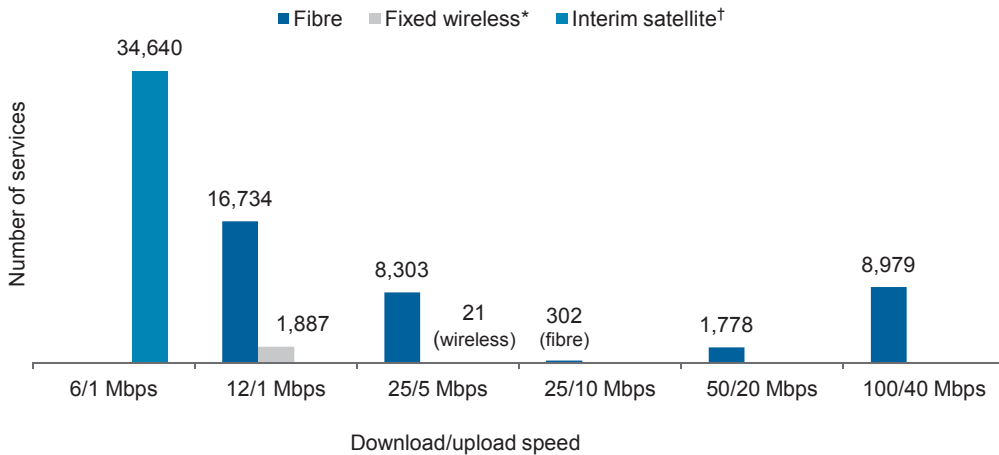
NBN services in operation

On the basis of data provided to the ACMA by NBN Co, there were 72,644 NBN services in operation at June 2013—36,096 fibre, 34,640 interim satellite and 1,908 wireless services (Figure 1.13).

All satellite services in operation provided maximum speeds of 6 Mbps download and 1 Mbps upload, with the majority of fixed-wireless services in operation providing a maximum speed of 12 Mbps download and 1 Mbps upload.

In terms of the distribution of 36,096 NBN fibre services in operation at June 2013 by maximum download/upload speeds:

> 46 per cent (16,734) were services providing 12/1 Mbps

> 23 per cent (8,303) were services providing 25/5 Mbps

> one per cent (302) were services providing 25/10 Mbps

> five per cent (1,778) were services providing 50/20 Mbps

> 25 per cent (8,979) were services providing 100/40 Mbps.

Figure 1.13 NBN services activated by type and upload/download speed of service at June 2013

Legend: ■ Fibre ■ Fixed wireless* ■ Interim satellite†

Y-axis: Number of services
X-axis: Download/upload speed

- 6/1 Mbps: 34,640
- 12/1 Mbps: 16,734; 1,887
- 25/5 Mbps: 8,303; 21 (wireless)
- 25/10 Mbps: 302 (fibre)
- 50/20 Mbps: 1,778
- 100/40 Mbps: 8,979

Fixed-wireless services only available in 12/1 Mbps and 25/5 Mbps.
†The speed of interim satellite is 6/1 Mbps.
Note: Numbers are calculated from counts of active services against the UNI-V and UNI-D ports. Services activated does not equal the premises activated as there may be more than one service for each premise.
Source: NBN Co.

NBN service providers

NBN Co reported that at 30 June 2013, there were 58 retail service providers (RSPs) offering services on the fibre access network, 36 RSPs offering services on fixed wireless and 10 RSPs offering services on satellite.[23] Table 1.6 provides an overview of the majority of NBN service providers by network.

Table 1.6 NBN retail service providers by service type June 2013

Service provided	Retail service provider
Fibre/fixed wireless	AAPT *, AARnet †, Ace Internet Services, Adam Internet, Activ8me, Advanced NBN, Anittel *, ANT, Arrow Voice & Data*, Aussie Broadband, Aussie Broadband Services, Boom Broadband, Broadband Solutions, Clear Networks , Club Telco, Commander*, Cybertel Telecom, DeVoteD NBN, Engin, EscapeNet, Exetel, Fastel, Graytech Hosting Pty Ltd, Infinity NBN, Internet Solutions, Internode, iPrimus, Key Internet, Loadednet, Macquarie Telecom*, Montimedia Internet, MyFibre, MyNetFone, NBN SP, Node1 Internet, North Queensland Telecom, NuSkope, On Q Telecom, Optus, SkyMesh, Southern Phone, Spintel, Spirit Telecom, Telstra, TransACT, Westnet.
Satellite services	Activ8me, ANT, Bordernet, Clear Networks, Harbour ISP, iiNet, IPSTAR Australia, Reachnet, TransACT, Westnet..

Business services only.
*†Education and research purposes only.*
Note: List of providers available at time of publication.
Source: NBN Co.

Carrier licensing

At June 2013, there were 201 licensed carriers in Australia with the ACMA granting 21 carrier licences over 2012–13. In this same period, seven carriers surrendered their licence (Figure 1.14) and no licensed carriers were deregistered by the Australian Securities and Investments Commission.

Figure 1.14 Trends in carriers licensing
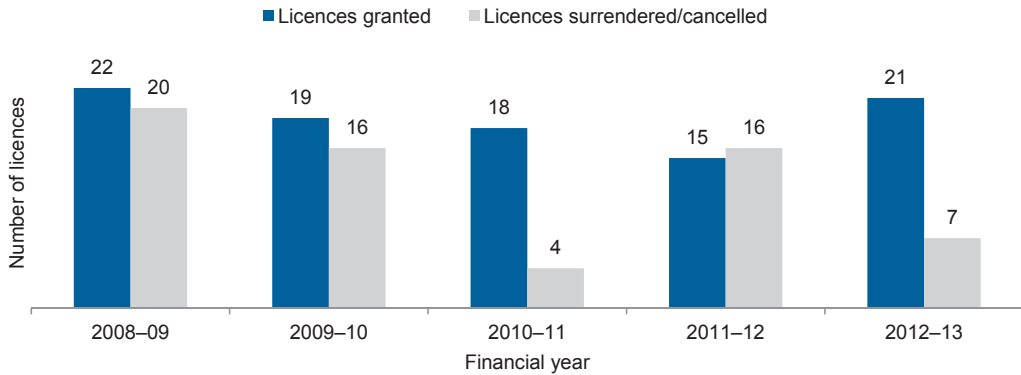
Source: ACMA licensing figures.

At June 2013, there were 71 nominated carrier declarations (NCDs) in force. In 2012–13, the ACMA granted two NCDs and revoked two NCDs (Figure 1.15). During 2012–13, the ACMA issued two trial certificates compared to five in the previous period.[24] Trial certificates facilitate provision of new technology and services into the communications market.

Figure 1.15 Trends in nominated carrier declarations
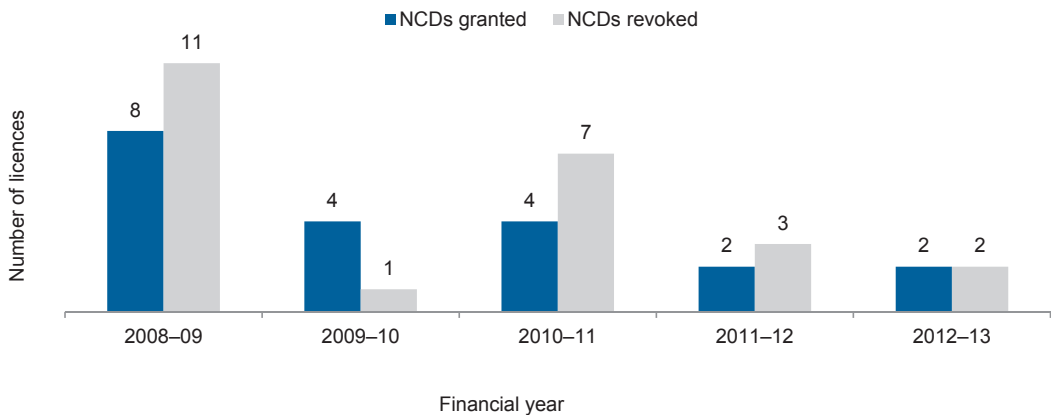
Source: ACMA licensing figures.

Allocation of numbers

Smartnumbers

The smartnumbers auction system was introduced in 2004 as an efficient way to allocate freephone and local rate numbers (FLRNs)—numbers commencing with 13, 1300 and 1800—and to enable an appropriate return for this valuable and limited resource. The ACMA currently conducts public auctions each fortnight. In 2012–13, the ACMA sold 4,479 numbers through the smartnumbers auction allocation system and raised approximately $1.68 million in revenue. This is comparable with 2011–12, when 4,988 numbers were purchased and $1.74 million in revenue was raised.

Geographic numbers

There was a decrease in geographic numbers allocated to CSPs during 2012–13 compared to 2011–12.

Figure 1.16 shows the quantity of geographic numbers allocated to CSPs over the last five financial years. In 2012–13, CSPs were allocated 1.78 million geographic numbers—down 33 per cent on allocations in 2011–12 but higher than in 2009–10 and 2010–11.

The decrease may reflect consolidation in the market, with all numbers allocated during 2012–13 being to CSPs that had received previous allocations of numbers. One CSP was allocated 813,000 numbers to enable it to provide services in all areas of Australia.

CSPs surrendered 419,100 geographic numbers during 2012–13 compared with 18,400 for 2011–12. A large portion of these can be attributed to an ACMA request to CSPs to surrender numbers not in use. During 2012–13, 1.56 million geographic numbers were transferred between three CSPs. The transfers were mainly related to interconnect agreements between CSPs.

Figure 1.16 Trends in numbers allocated
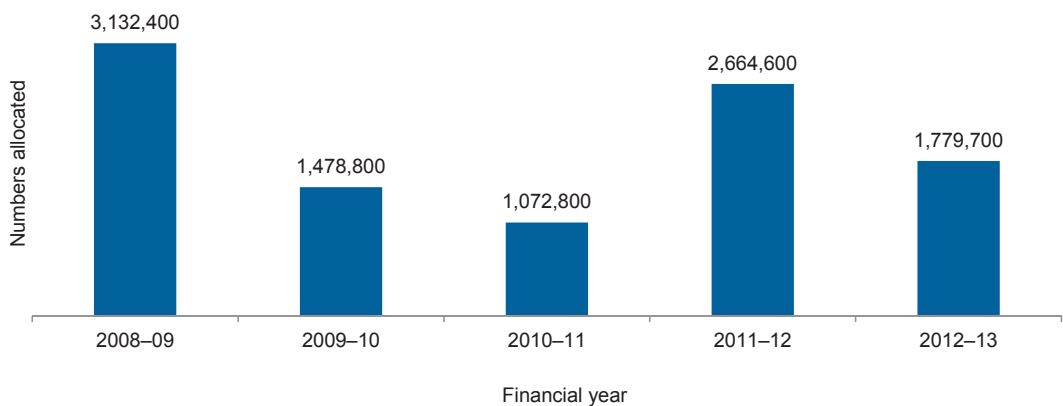
Source: The ACMA.

Digital mobile numbers

During 2012–13, CSPs were allocated 2.91 million digital mobile numbers, down from 6.4 million during 2011–12 and 5.9 million in 2010–11. At 30 June 2013, 34.4 per cent of available mobile numbers had been allocated. The use of mobile numbers for devices with wireless internet connectivity and for machine-to-machine communication continues to drive demand for mobile numbers.

Location-independent communications service numbers

Numbers commencing with 0550 are for use with location-independent communications services (LICS) and have been available since 2007. This range is available for IP-based services that are 'nomadic' (not fixed to a particular geographic location). There has been limited take-up of LICS numbers, and more recently these numbers have been identified for future use for digital mobile services.

At 30 June 2013, 17,000 LICS numbers were allocated to five CSPs. During 2012–13, 10,000 numbers were allocated and no numbers were surrendered.

Other numbers

During 2012–13, there was limited demand from CSPs for number types other than geographic and digital mobile services. Four mobile network codes and one international signalling point code were issued to network operators. The three remaining analog AMPs numbers in use in network systems were also surrendered to the ACMA.

Broadcasting services

The number of broadcasting (television and radio) licences in operation remained relatively stable from the 2011–12 reporting period. At June 2013, there were 346 commercial broadcasting (radio and television) licences, 2,737 subscription television licences and 519 community radio and television licences (including temporary licences) active in Australia (Figure 1.17).

Figure 1.17 Number of broadcasting licences in operation in Australia
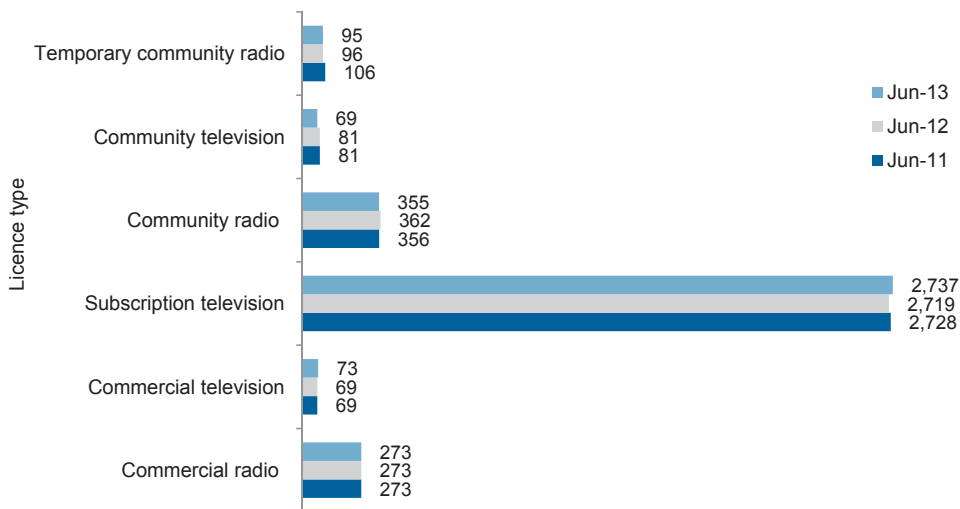
Note: The decrease in community radio and television licences reflects the number of indigenous broadcasting licences that lapsed and were not renewed during 2012–13.
Source: The ACMA.

Commercial broadcasting services

Commercial broadcasting services comprise free-to-air radio and television services that are made available to the general public. Commercial free-to-air broadcasting services are also licensed to operate within specified geographic areas and have regulations to limit concentration of their ownership and control.

Ownership and control of commercial television services

There were a number of control changes in the media industry during 2012–13. Some of the changes were a result of financial or company restructures, while others involved the transfer of licences to different media networks or groups.

The Seven, Nine and Ten networks operate commercial television broadcasting licences predominantly in metropolitan markets. Their programming is also made available in regional markets through affiliation agreements with the regional television licences controlled by Prime Media Group Limited, Southern Cross Media Group Limited, WIN Corporation Pty Ltd and Imparja Television Pty Ltd.[25] Table 1.7 summarises ownership and control of commercial television services in Australia.

A discussion of broadcasters' compliance with notification of change in control requirements is provided in Chapter 4 of this report.

Table 1.7 Ownership and control of commercial television services (major networks)

Network	Ownership and control		
	Licence type	Number	Operations
Seven Group Holdings Ltd	Metropolitan	5	Operates commercial licences in Sydney, Melbourne, Brisbane, Adelaide and Perth
	Regional	1	Covering regional Queensland
Nine Entertainment Co Holdings Ltd	Metropolitan	3	Operates commercial licences in Sydney, Melbourne and Brisbane
	Regional	3	One each in the Darwin and northern New South Wales licence areas, and a digital-only television joint venture with Southern Cross Media Group Ltd in the Darwin licence area
Ten Network Holdings Ltd	Metropolitan	5	Commercial stations in Sydney, Melbourne, Brisbane, Adelaide and Perth
WIN Corporation Pty Ltd	Metropolitan	2	Commercial television licences affiliated with Nine Network programming in Perth and Adelaide
	Regional	21	Commercial television licences operating across Australia, including digital-only television licences through joint venture partnerships with: > Southern Cross Media Group Ltd in Tasmania > Prime Media Group in the Mildura, Geraldton, Kalgoorlie, Western Zone, South West and Great Southern television licence areas includes three digital-only television licences, respectively servicing Griffith, Riverland and Mount Gambier South-East
Southern Cross Media Group Ltd	Regional	19	Commercial television licences operating across Australia, including joint ventures in relation to digital-only television services in Darwin, Tasmania, Mt Isa and the remote central and Eastern Australia licence areas, and digital-only television services in Broken Hill and Spencer Gulf
Prime Media Group Ltd	Regional	13	Commercial television licences operating across Australia including joint venture partnerships with the WIN Corporation Pty Ltd for digital-only television licences servicing the Mildura, Geraldton, Kalgoorlie, Western Zone, South-West and Great Southern licence areas

Note: Does not include licenses for services provided with the use of satellite allocated under Section 38C and other licences allocated under subsection 40(1) of the Broadcasting Services Act 1992.
Source: The Register of Controlled Media Groups.

Ownership and control of commercial radio services

Table 1.8 shows that:

> Southern Cross Media Group Limited, Australian Radio Network Pty Ltd, Illyria Radio Investments Ltd and Fairfax Media Limited own the majority of capital city commercial radio broadcasting licences.

> Southern Cross Media Group Limited, Broadcast Operations Pty Ltd (Super Radio Network) and Grant Broadcasters Pty Ltd remain the three largest networks of regional commercial radio broadcasting licences.

> Eleven radio licence owner groups control five or more commercial radio broadcasting licences each—ACE Radio Broadcasters Pty Ltd, Australian Radio Network Pty Ltd, Illyria Radio Investments Ltd, Fairfax Media Limited, Grant Broadcasters Pty Ltd, Southern Cross Media Group Limited, Prime Media Group Limited, Redwave Media Limited, Macquarie Radio Network Limited, Broadcast Operations Pty Ltd (Super Radio Network) and Resonate Broadcasting Pty Ltd.

> The remaining 19 radio licence owners/controllers hold fewer than five licences each.

Table 1.8 Ownership and control of commercial radio services

Network group company	Total commercial radio licences controlled	Ownership and control Licenses and operations
ACE Radio Broadcasters Pty Ltd	13	Mainly in regional Victoria, but also has one radio licence in the regional New South Wales licence area of Albury
Australian Radio Network Pty Ltd	12	Metropolitan radio licences in Adelaide, Brisbane, Melbourne, Sydney and Western Suburbs Sydney One regional radio licence in Katoomba Two joint-venture licences with DMG Radio, one in each of Brisbane and Perth, and two joint-venture licences with Southern Cross Austereo in Canberra
Illyria Radio Investments Ltd	10	Metropolitan radio licences in Adelaide, Brisbane, Melbourne and Sydney as well as one regional radio licence in Gosford Two joint-venture licences with Australian Radio Network, one in each of Brisbane and Perth
Fairfax Media Ltd	7	Metropolitan radio licences in Brisbane, Melbourne, Perth and Sydney
Grant Broadcasters Pty Ltd	42	Radio licences in regional areas of Australia
Macquarie Radio Network Ltd	8	Two metropolitan radio licences in Sydney Radio licences in regional Queensland (Charleville, Emerald, Kingaroy, Mt Isa and Roma)
Prime Media Group Ltd	10	Radio licences in the following areas of regional Queensland—Cairns, Gympie, Mackay, Nambour, Rockhampton and Townsville
Redwave Media Ltd/Seven Group Holdings Ltd	9	Radio licences in the following areas of regional Western Australia—Bunbury, Geraldton, Karratha, Port Hedland and Remote Commercial Radio Service Western Zone
Resonate Broadcasting Pty Ltd	5	Regional radio licences, two in each of, Longreach and Charters Towers and one in Warragul
Southern Cross Media Group Ltd	78	Metropolitan radio licences in Adelaide, Brisbane, Melbourne, Perth and Sydney Radio licences in various regional areas of Australia
Broadcast Operations Pty Ltd (Super Radio Network)	36	Radio licences mainly in regional areas of Australia, but also has one metropolitan radio licence in Sydney

Note: Table only includes networks with five licences or more.
Source: The Register of Controlled Media Groups.

A number of key changes occurred in 2012–13:

> On 2 July 2012, Mr Guy Dobson and Mr Rex Morris acquired two commercial radio broadcasting licences in Longreach from Radio Outback Pty Ltd.

> On 5 July 2012, companies controlled by Mrs Gina Rinehart sold some shares in Fairfax Media Limited, taking her interest to below 15 per cent. As a result, she ceased to be 'deemed' in a position of control of the commercial radio licences and associated newspapers controlled by Fairfax Media Limited.

> On 31 August 2012, companies controlled by Mr Lachlan Murdoch (which held a 50 per cent interest in the DMG radio licences, Nova and Smooth FM) acquired the remaining interest in those licences from Daily Mail and General Holdings Limited, who then ceased to be a controller of those licences.

> On 6 February 2013, 85 lenders of the Nine Network (Nine Entertainment Co Holdings Ltd) became controllers of the Nine Network.

> On 15 March 2013, Southern Cross Media Group Limited sold its two radio licences in Nambour to a new entrant into the industry, Eon Broadcasting Pty Ltd, a subsidiary of HCI International Holdings Limited.

> On 23 May 2013, the private equity group, Kohlberg Kravis Robert (KKR) sold its remaining 12 per cent interest in the Seven Network (Seven West Media Ltd), to a broad spread of institutional investors.

> On 28 June 2013, News Corporation finalised its restructure, splitting its international entertainment arm—including FOX and BSkyB (into '21st Century Fox')—from its publishing arm that includes Australian newspapers as well as FOXTEL (including News Ltd newspapers and Australian pay-TV distribution).

Cross-media ownership

A small number of companies control two types of media assets in the same markets:

> Southern Cross Media Group Ltd controls a combination of radio and television broadcasting licences in 26 radio licence areas.

> Fairfax Media Limited controls two radio licences and a newspaper in Melbourne, and a radio licence and a newspaper in Sydney.

> Seven Group Holdings Limited controls a television licence and controls a newspaper in Perth.

> WIN Corporation Pty Ltd controls a radio and television licence in Wollongong.

> Mr Lachlan Murdoch, through his interests in Ten Network Holdings Limited and Illyria Radio Investments Ltd radio licences, controls two radio licences and a television licence in each of the Sydney, Brisbane, Adelaide and Melbourne metropolitan licence areas, and one radio licence and one television licence in Perth and Gosford.

Register of Controlled Media Groups

The Register of Controlled Media Groups—published on the ACMA 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 has increased to 187 at June 2013.

Subscription television in Australia

In 2012–13, the ACMA allocated one subscription television broadcasting licence to Konnectv Pty Ltd.

FOXTEL's subscriber numbers increased from 2.40 million at June 2012 to 2.48 million at June 2013, an increase of three per cent (both numbers include Austar subscriber numbers, following on from FOXTEL's purchase of Austar in May 2012).

Community radio broadcasting licences

Community broadcasting services are radio and television broadcasting services that are provided for community purposes and must not be operated for profit or as part of a profit-making enterprise. They must encourage community participation in service operation and programming.

At 30 June 2013, there were 355 long-term community radio broadcasting licences, representing a range of community interests (Table 1.9). Forty-nine per cent of community radio broadcasting services represent the general community in their respective licence areas.

During 2012–13, the ACMA:

> renewed 158 community radio broadcasting licences

> refused the renewal of one community broadcasting licence (7HRT)

> allocated one community radio broadcasting licence for Cherbourg, Queensland

> decided not to allocate the community radio broadcasting licence for Cairns, Queensland.

The licences for six remote Indigenous community radio broadcasting licences lapsed because the licensees did not submit an application for renewal.

One community broadcasting licence (4JAZ) was surrendered to the ACMA during 2012–13.

Table 1.9 Community radio broadcasting services by community interest, June 2013

Community interest	Number	% of total
Aboriginal and Torres Strait Islander	94	26
Educational/special interest	22	6
Ethnic	6	2
General geographic area	175	49
Music	8	2
Religious	34	10
Senior citizen	8	2
Youth	8	2
Total	**355**	**100**

Source: The ACMA.

Temporary community radio broadcasting licences

The temporary community radio broadcasting licence scheme allows the ACMA to allocate non-renewable community radio licences to eligible aspirant broadcasters. There were 95 temporary licences at 30 June 2013.

Community television services

There were 69 long-term community television broadcasting licensees at 30 June 2013, of which three were in the metropolitan areas of Brisbane, Melbourne and Sydney. The remaining 66 were remote Indigenous broadcasting services. The

licences for 12 remote Indigenous community television broadcasting services lapsed because the licensees did not submit an application for renewal.

The ACMA renewed 59 community television broadcasting licences during 2012–13, all of which were remote Indigenous broadcasting services.

Community television trials

During 2012–13, the ACMA decided to make spectrum available for further community television trials in Adelaide and Perth for the period 1 July 2013 to 31 December 2013. These services operate under the open narrowcasting class licence, subject to a condition on the apparatus licence that they be used only to provide an open narrowcasting television service for community and educational non-profit purposes.

Advertising expenditure in main media

Commercial Economic Advisory Service of Australia (CEASA) data for the year ended 31 December 2012 shows that total advertising expenditure is yet to reach pre-GFC levels, with advertising expenditure declining by 1.6 per cent in 2012 to $13.27 billion. The television and print media attracted the majority of advertising expenditure during this period. In the 2012 calendar year, these two forms of media accounted for 33 and 29 per cent of total advertising expenditure respectively.[26] However, in 2012, the amount of advertising expenditure on both television and print media decreased (one and 16 per cent, respectively).

Continued growth in expenditure on online advertising channels

Expenditure on online advertising grew by 26 per cent to total $3.34 billion over the 2012 calendar year (Figure 1.18). This represented a 25 per cent share of total media advertising expenditure compared to 20 per cent during 2011 and 17 per cent during 2010. The 2012 calendar year was characterised by significant growth in all online advertising categories with the online general category exhibiting the greatest proportional increase. Revenue in the classifieds and search & directories categories increased by just over nine per cent and 27 per cent respectively, with the online general category reporting a year-on-year revenue increase of 39 per cent.

Figure 1.18 Online advertising expenditure, 2010–2012
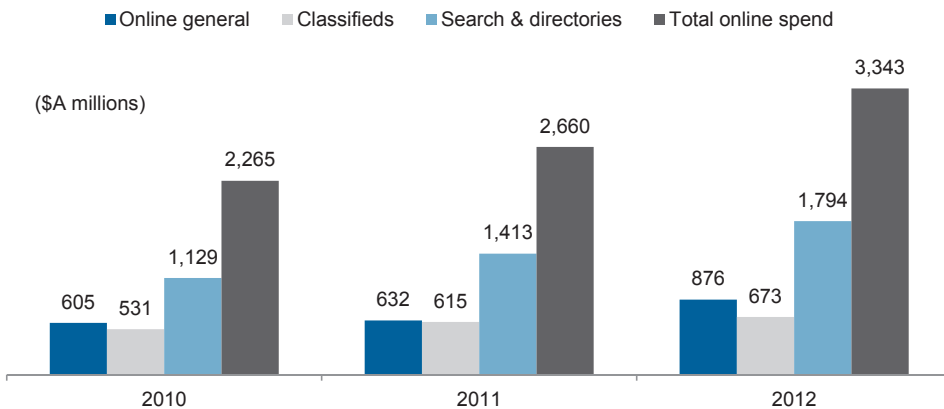
Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2012.

Consumer use of traditional media and growth in online digital content activities

Use of traditional broadcast media

Despite the increasing use of online content service delivery models, Australians' levels of use of traditional media channels (television and radio services) have remained relatively stable over the past five years. This is reflected in figures 1.19 and 1.20, which show time spent watching and listening to commercial television and radio.

Figure 1.19 Commercial television viewing on a normal weekday
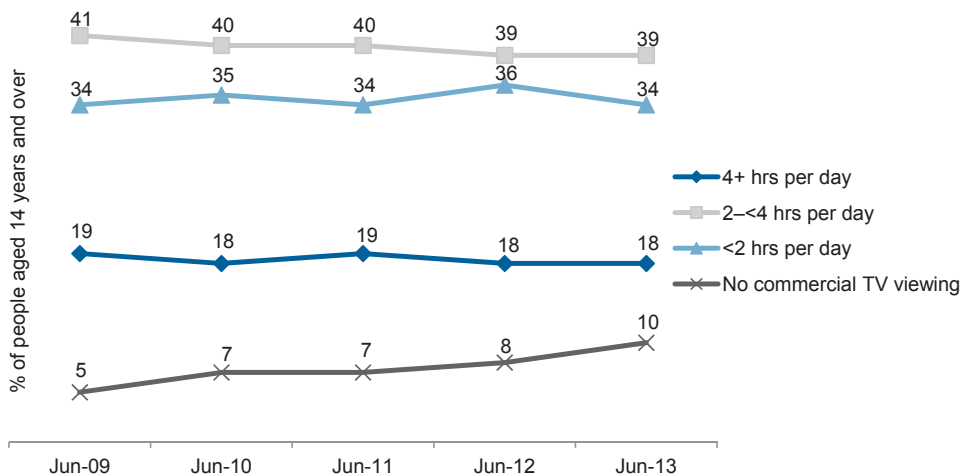
Source: Roy Morgan Single Source.

Figure 1.20 Commercial radio listening on a normal weekday
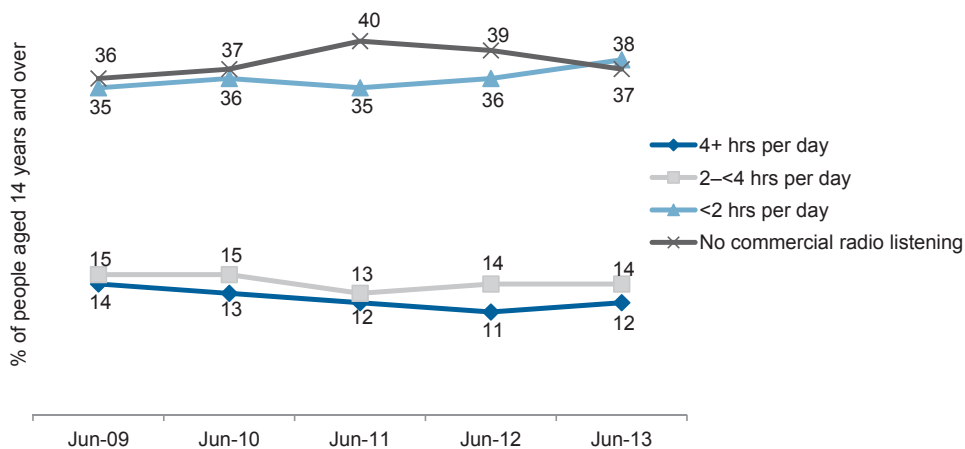
Source: Roy Morgan Single Source.

The shift to online content formats and the proliferation of user pays models

While the use of traditional media channels has seen little change over the last five years, the increased frequency of internet use in Australia is a driving factor in the emergence of online content services such as news and catch-up television. During June 2013, an estimated 14.77 million Australians aged 14 years and over went online compared to 14.34 million during June 2012.[27] Australians are going online more frequently, with the number of internet users going online at least once a day during 2012–13, increasing by nearly seven per cent to 11.56 million people (Figure 1.21).

Figure 1.21 Australians going online more than once a day
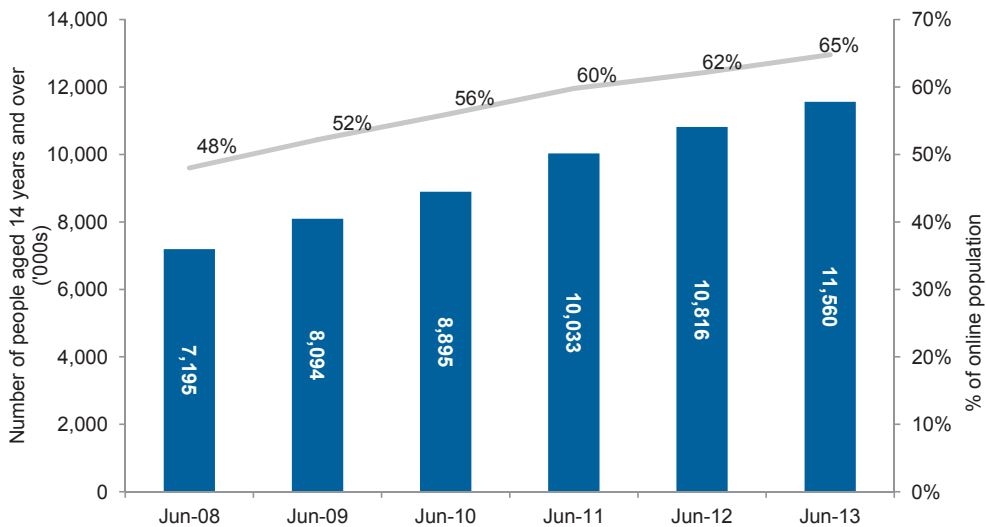
Source: Roy Morgan Single Source.

The availability of higher-speed internet services and the growth in online content services such as video on demand and catch-up television has seen Australians increasing their online media consumption in addition to their existing offline media use. For example, during June 2013 (in comparison to June 2012):

> five million people streamed videos online, an increase of 14 per cent

> 2.6 million streamed music, an increase of 27 per cent

> 1.7 million streamed TV programs, an increase of 10 per cent.

All online activities saw a steady increase in the five years to June 13 with one exception. The number of people downloading video clips peaked at 1.58 million in June 2011, falling to 1.14 million at June 2012, and up to 1.33 million at June 2013.

Figure 1.22 Digital media activities undertaken online by Australians during the month of June

Number of people aged 14 years and over ('000s)

	Jun-13	Jun-12	Jun-11	Jun-10	Jun-09
Streamed video (e.g., YouTube)*	4,991	4,395	2,631	2,314	
Streamed music	2,617	2,058	1,202	1,009	757
Streamed TV (e.g., ABC iView)†	1,709	1,556	1,056	568	355
Downloaded TV programs	1,584	1,161	974	787	625
Streamed radio	1,536	1,224	912	709	796
Downloaded video clips	1,333	1,141	1,580	1,433	1,347
Downloaded feature-length movie	1,233	918	612	515	455
Streamed feature-length movie^	660	278			

*Data not available for June-09. Excludes full-length TV content.
†Relates to use of catch-up TV services.
^Data not available for June-09, June-10 or June-11.
Note: Comparable data before 2009 not available.
Source: Roy Morgan Single Source.

Online video content services

The growth in online participation, in conjunction with increased network capabilities and ongoing challenges to traditional revenue streams, has seen a growth in online video content services.

In the six months to May 2013, 7.86 million Australians aged 18 years and over accessed a commercial or free-to-air online video content (OVC) service compared to 5.16 million in the six months to May 2012, a 52 per cent increase. The majority of OVC activity related to the use of online catch-up television services. ACMA research showed that in the six months to May 2013:

> 6.69 million used a catch-up television service
> 1.94 million used video on demand services
> 1.38 million used a commercial internet television service such as IPTV.

In addition, an estimated 5.2 million Australians aged 18 years and over had access to a 'time-shifting' device (used to access professionally produced content services) at June 2013, an increase of seven per cent in comparison to June 2012. Some of these devices are outlined in Figure 1.23.

Figure 1.23 Access to time-shifting content devices in the home, June 2013

Number of people aged 18 years and over ('000s)
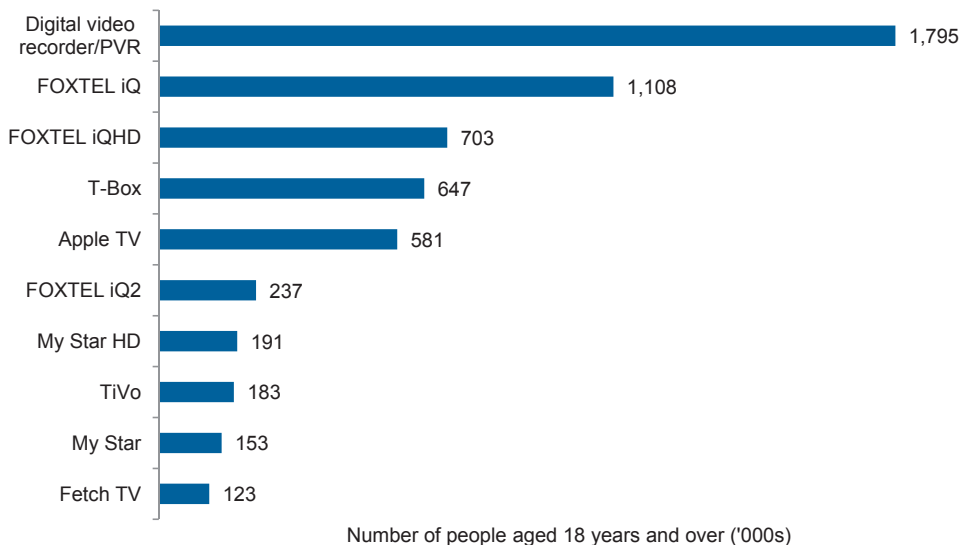
Source: Roy Morgan Single Source.

Online news services

Australians are increasingly shifting their news viewing from traditional news sources such as newspaper and television to online methods, with 65 per cent of Australians (11.39 million) accessing news online at May 2013.[28]

Figure 1.24 shows a strong preference for local news, with Australian news sites accounting for nine out of the top 10 sites accessed by Australians during June 2013. While major daily newspapers in Australia already have a significant number of readers accessing their online news sites, non-print news and international organisations continue to attract significant online readership in Australia. News websites such as Ninemsn news, Yahoo7 News, ABC News and the BBC news all featured in the top 10 online news sites.

With revenues from traditional print media in decline, pay-per-view models are being explored as a mechanism to generate revenue from this growing online audience. The two largest media organisations in Australia (News Corporation and Fairfax) have introduced metered models that allow users to only view a limited number of articles per week before being asked to register. For example:

> News Corporation launched a metered service in May 2013 that allows unregistered readers to access five articles a week at *The Daily Telegraph* and the *Herald Sun*. Registered users can access an additional 15 articles per week at *The Daily Telegraph* and 10 per week at the *Herald Sun* and paid subscribers can access all content.[29]

> In July 2013, Fairfax introduced a similar model for the *Sydney Morning Herald* and *The Age.* Both media organisations are extending the model to other publications.[30]

Not only does this model provide revenue for News Corporation and Fairfax, the gathering of registration details also enables the organisations to allow advertisers to better target advertising to users, making it a more powerful tool.

ACMA research indicates that, although the major newspapers are moving to metered models, the number of paid subscribers is still relatively low at just over six per cent (1.08 million people) at May 2013. This is a continuing challenge to the long-term sustainability of these business models.[31]

Figure 1.24 Australians accessing online news sites during June 2013

Site	Online audience ('000)
news.com.au	2,870
ninemsn news websites	2,616
smh.com.au	2,596
Yahoo!7 news websites	2,498
The Age	1,827
ABC news websites	1,616
Herald Sun	1,615
BigPond news websites	1,422
BBC	1,258
The Telegraph	1,120
The Guardian	1,020
couriermail.com.au	932
The Australian	909
CNN Digital Network	903
MailOnline	858
HuffingtonPost	775
brisbanetimes.com.au	737
Google News	700
AdelaideNow	582
Telegraph	575

Note: Relates to use of a particular site at least once in the month reported.
Source: The Nielsen Company.

Endnotes

[1] Telstra, 'Full Year 2012 Financial Results—CEO/CFO Analyst briefing presentation', 9 August 2012.

[2] ACMA-commissioned survey May 2012 and May 2013.

[3] www.pace.com/global/our-thinking/over-the-top-services-ott/

[4] mobile squared, *OTT Services Blow Up the Mobile Universe,* September 2013.

[5] ibid.

[6] European Commission, 'Special Eurobarometer 396', August 2013.

[7] Ofcom, March 2013.

[8] UK data from Ofcom, March 2013 and US data from Pew Internet.

[9] Company annual reports.

[10] Telstra, Telstra Annual Report 2013, 7 August 2013.

[11] Optus annual report.

[12] ACMA press release, *Digital dividend auction–results*, 7 May 2013.

[13] Mobile wireless and handset subscribers provided by the ABS as a proportion of the total mobile voice and data subscribers provided by the ACMA.

[14] Roy Morgan Single Source, June 2013.

[15] *ABS, 8153.0-Internet activity, Australia, June 2013.*

[16] The Broadband Commission for Digital Development, *The State of Broadband 2013: Universalizing Broadband*, September 2013.

[17] Roy Morgan Single Source, June 2013.

[18] Pew Research Center, May 2013 and April 2012.

[19] Ofcom, March 2013 and March 2012.

[20] ACMA-commissioned research. Multiple responses were allowed.

[21] Includes Service Class 0 premises which were in the footprint of the NBN Fibre Network but not currently NBN serviceable for the purposes of the NBN Co fibre access service as at 30 June 2013.

[22] SFAA, WBA Product Catalogue – NBN Co Operations Manual version 1.16, 14 October 2013, page 62.

[23] NBN Co, *2013 Annual Report*.

[24] A trial certificate permits the owner of one or more network units to trial new network units and services without the need for a carrier licence. A trial certificate may be issued for a period up to six months.

[25] Imparja Television Pty Ltd and Southern Cross Media Group Ltd jointly control digital-only television licences, one in each of the remote central and eastern Australia television licence areas and the Mt Isa television licence area.

[26] Commercial Economic Advisory Service of Australia (CEASA) Advertising expenditure in main media: Year ended 31st December 2012. April 2013, p.1.

[27] Roy Morgan Single Source.

[28] ACMA-commissioned survey, May 2013.

[29] Mike King, 'News Corp unveils paywall', *The Motley Fool*, 8 May 2013.

[30] *ABC News*, 'Fairfax launches metered paywalls', 2 July 2013.

[31] ACMA-commissioned research.

Chapter 2
National interest issues

Overview

This chapter provides information on the performance of the emergency call service and the communications industry's support for law enforcement and national security agencies in terms of maintaining communication interception capabilities and the authorised disclosure of information. Information on the protection of Australia's critical submarine cable infrastructure and radiocommunications interference complaints is also presented.

Key developments during 2012–13 included:

> decreases in number of calls to the emergency service numbers Triple Zero and 112

> decrease in formal warnings issued to callers for misusing the Triple Zero service

> Telstra continuing to perform above the regulatory requirement in relation to emergency call answering

> an increase in the cost to industry of providing interception capability

> a slight decline in the number of domestic systems interference complaints and an increase in the number of radiocommunications interference complaints.

Emergency call service

Under the Telecommunications (Emergency Call Service) Determination 2009 (the Emergency Call Service Determination), CSPs are required to provide free access to the emergency call service from standard telephone and mobile services. The emergency call service is an operator-assisted service that connects callers to an emergency service organisation (ESO)—police, fire or ambulance—in life-threatening or time-critical situations.

The emergency call service is provided by the emergency call persons (ECPs):

> Telstra—for calls made to the primary emergency service number (Triple Zero) and to the international emergency number 112 for mobile phones

> Australian Communication Exchange (ACE)—for calls made to the 106 text service for people who are deaf or have a hearing or speech impairment.

This section outlines the volume and type of calls to the emergency call service, along with the performance of the ECPs in answering emergency calls.

Emergency call service—Triple Zero and 112

ECP data shows a decrease in the number of calls to the Triple Zero and 112 emergency service numbers in 2012–13 (see Table 2.1). During this period, there were 8,854,728 calls to Triple Zero and 112, a decrease of 574,867 (6.1 per cent) from 2011–12, which indicates a return to 2009–10 and 2010–11 call levels. This was an expected result given the high number of accidental calls to Triple Zero in 2011–12 attributed to a faulty mobile handset entering the Australian market in 2011–12. A program to replace the faulty handsets was implemented in November 2011 and effectively addressed the issue before 2012–13.

In 2012–13, the proportion of emergency calls made from mobile phones declined slightly to 66.9 per cent (see Table 2.1). Calls from fixed-line telephones represented 30.7 per cent, with 2.4 per cent made from public payphones.

Telstra's performance in answering emergency calls

Section 32 of the Emergency Call Service Determination sets out performance criteria for the ECP's answering of calls to Triple Zero and 112, as follows:

> 85 per cent of emergency calls answered within five seconds

> 95 per cent of emergency calls answered within 10 seconds.

As in previous years, Telstra performed above the regulatory requirement in the reporting period (Table 2.1).

Calls connected to emergency service organisations

The ECP transfers emergency calls to the relevant state or territory emergency service answering point, which is responsible for arranging for the dispatch of an emergency response. In 2012–13, 5,727,411 calls were transferred to an ESO, an increase of three per cent on the previous year (see Table 2.1).

Calls identified by the ECP as being non-emergency calls are not connected to an ESO. Non-emergency calls include misdials, automatically generated calls from incorrectly programmed fax machines or modems, callers reporting matters that are not emergencies and hoax and malicious calls.

The ACMA is continuing to monitor the results of an escalated warning process, which was introduced in July 2009, and is managed by Telstra (as the ECP for 000 and 112) and the three mobile network owners. These processes can lead to a mobile handset being blocked from making most calls if it is used to make repeated non-emergency calls to Triple Zero. On average, 95 per cent of callers making repeated non-emergency calls are deterred from further misuse after receiving a warning from the ECP. In 2012–13, 796 callers were formally warned for misusing the Triple Zero service, compared to 1,359 callers during 2011–12. No services were suspended.

Table 2.1 Call volumes to emergency call service numbers Triple Zero and 112, and call answering times

	2008–09	2009–10	2010–11	2011–12	2012–13
Total number of calls offered	10,301,011	8,833,683	8,867,191	9,429,595	8,854,728
Calls answered	93.1%	95.4%	95.8%	96.0%	96.0%
Calls answered in five seconds or fewer	96.3%	96.7%	95.7%	95.8%	95.8%
Calls answered in 10 seconds or fewer	98.3%	99.0%	99.1%	98.9%	99.1%
Calls transferred to an ESO	5,352,425	5,288,836	5,354,680	5,561,072	5,727,411
Answered calls transferred to an ESO	55.8%	62.8%	63.1%	61.5%	64.7%
Calls offered from mobile phones	62.8%	62.9%	63.9%	67.3%	66.9%

Note: The term 'calls offered' refers to the number of calls received by the ECP after the Recorded Voice Announcement (RVA). The RVA gives people who have inadvertently or otherwise dialled Triple Zero the opportunity to hang up before being connected to the ECP. Calls answered refer to the percentage of these calls that were answered.
Source: Emergency call person (Telstra).

Precise mobile location for emergency service organisations

The Emergency Call Service Determination requires a mobile carrier to provide the most precise information it has available about the location of a person using a mobile phone to make an emergency call. This information is provided by the mobile network owners upon request of an ESO. During the reporting period, the mobile carriers responded to 3,179 requests from ESOs for precise mobile location. The ACMA has not received any complaints from ESOs about mobile carrier compliance with this requirement.

The ACMA is also continuing to work with industry and ESOs in implementing a longer term solution that would see the automatic delivery of precise location information with every emergency call. This longer term solution is expected to be implemented by 31 May 2014.

Requirement to provide access to Emergency Call Service from satellite services

Following a public consultation process, the ACMA amended the Emergency Call Service Determination in June 2013 to impose emergency call service requirements in relation to a wider range of satellite phone services.

Under the revised regulatory arrangements, from 1 July 2013 all satellite phone services must be capable of accessing the emergency service numbers 000 and 112. In addition, all satellite phone services technically capable of carrying a call to 106 TTY text service must carry such calls. The amended Determination also provides for a limited exemption for services supplied to non-handheld satellite services by Inmarsat Global Limited that are not supplied for voice services in fulfilment of the universal service obligations. These exempt services are marketed to commercial users (for example, shipping and aeronautical industries) where there is little or no expectation that Triple Zero is accessible.

The amendments were made in response to concerns raised in a report of the 2011–12 Regional Telecommunications Review Committee about emergency call services access from satellite phones.

Complaints about the Triple Zero service

During the reporting period, the ACMA received nine complaints about the Triple Zero service and commenced one investigation into a CSP's compliance with the requirement to provide Triple Zero access. Most of the complaints related to the handling of calls by the ESOs (and not to Telstra as the ECP for 000 and 112) and were accordingly referred to the relevant ESO for a response.

Emergency call service—106 TTY (teletypewriter) text service

The relay service provider for the National Relay Service (NRS) is specified as an ECP in the Emergency Call Persons Determination. ACE is currently contracted by the Commonwealth as the NRS relay service provider and operates a text emergency service on the 106 number in this capacity. The 106 text emergency service is available for users with a teletypewriter (TTY). There were 199 genuine calls to ESOs via the 106 text emergency service in 2012–13, compared to 142 genuine calls in 2011–12 and 175 in 2010–11.

As shown in Figure 2.1, a significant number of genuine calls were also relayed by the NRS to ESOs via the Triple Zero emergency services number. In these circumstances, TTY users contacted the NRS via normal access numbers and requested the call be relayed to Triple Zero, rather than dialling the 106 text emergency service number from their TTY. Calls to Triple Zero can also be relayed through the NRS for Internet Relay and Speak and Listen (speech-to-speech relay) callers, as these users are unable to access the 106 service.

A total of 475 genuine emergency calls were made via the NRS across all of these modes in 2012–13 (Figure 2.1), compared with 465 calls made during 2011–12.

Figure 2.1 Genuine emergency calls via the NRS, 2012–13
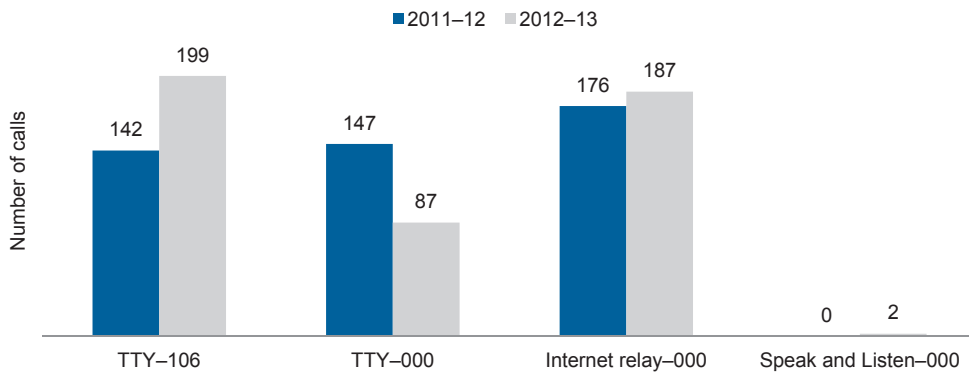
Source: NRS service provider (ACE).

Supporting law enforcement and national security agencies

The telecommunications industry, including internet service providers is obliged to provide reasonably necessary assistance to law enforcement and national security under section 313 of the Act. This assistance can take many forms, but most commonly involves providing of information about consumers of telecommunications services and their communications for the purposes of:

> enforcing the criminal law

> enforcing laws that impose a pecuniary penalty

> assisting the enforcement of the criminal laws in force in a foreign country

> protecting the public revenue

> safeguarding national security.

During the reporting period, the Attorney-General's Department (AGD) did not refer any carriers or CSPs to the ACMA for enforcement action for refusing to provide an agency with assistance.

The Department of Communications is considering the use of this obligation by enforcement agencies to block websites, with the aim to improve the transparency and accountability around blocking of online content under section 313 of the Act.

Disclosure of customer information

Customer information provided to telecommunications carriers, CSPs and telecommunications contractors is protected under Part 13 of the Act. Carriers, CSPs and telecommunications contractors are prohibited from disclosing information to other parties except in certain limited and restricted circumstances. Those circumstances include:

> where it is required or authorised by a warrant or under law

> disclosure to the ACMA, Australian Competition and Consumer Commission (ACCC), TIO or Telecommunications Universal Service Management Agency

where the disclosure may assist those agencies to carry out their functions or powers, or in the case of the TIO, assist in the consideration of a complaint

> an imminent threat to a person's life or health
> satisfying the business needs of other carriers and CSPs where the customer is or was a customer of a carrier or CSP.

Carriers and CSPs are required to report to the ACMA on any disclosures that are authorised under either Part 13 of the Act or Chapter 4 of the *Telecommunications (Interception and Access) Act 1979* (the TIA Act). During 2012–13, the number of disclosures made under Part 13 of the Act by CSPs and carriers declined by two per cent from 2011–12. The number and reason for disclosures made during 2012–13, as reported to the ACMA under section 308 of the Act, are provided in Table 2.2.

Table 2.2 Disclosures

Reason for disclosure	(Sub)section	Number of disclosures	
		2011–12	2012–13
Under the *Telecommunications Act 1997*			
Authorised by or under law	280	9,178	13,693
Made as a witness under summons	281	40	542
To assist the ACMA	284(1)	1,734	1530
To assist the ACCC	284(2)	6	1
To assist the TIO	284(3)	7,472	34,560
To assist the TUSMA	284(4)	n/a	29
Calls to emergency service number	286	2,605	4,001
To avert a threat to a person's life or health	287	8,731	12,000
Communications for maritime purposes	288	0	0
With the knowledge or consent of the person concerned	289	90,489	66,788
In circumstances prescribed in the Telecommunications Regulations 2001	292	0	0
Connected with an exempt disclosure	293	0	426
Subtotal		*120,255*	*133,570*
Under the *Telecommunications (Interception and Access Act 1979*)			
Voluntary disclosure	177	267	236
Authorisations for access to existing information or documents—enforcement of the criminal law	178	565,404	538,317
Authorisations for access to existing information or documents—locating missing persons	178A	1,973	1,233
Authorisations for access to existing information or documents—enforcement of a law imposing pecuniary penalty or protection of the public revenue	179	7,992	8,183
Authorisations for access to prospective information or documents	180	1,540	4,209
Enforcement of the criminal law of a foreign country (existing information)	180A	n/a	6
Enforcement of the criminal law of a foreign country (prospective information)	180B	n/a	3
Subtotal		*577,176*	*552,187*
Total		**697,431**	**685,757**

Note: Legislative amendments introduced the section 284(4) of the Act disclosures in July 2012 and the sections 180A and 180B of the TIA Act disclosures in October 2012.
Source: Carriers.

In relation to disclosures made under sections 178, 178A, 179 and 180 of the TIA Act, law enforcement agencies (civil and criminal) must be satisfied that the information they request is reasonably necessary to perform their law enforcement functions. An authorised officer must also consider whether any interference with the privacy of any person or persons that may result from the disclosure is justifiable, having regard to the likely relevance and usefulness of the information or documents and the reason why the disclosure concerned was authorised.

Emergency suspension of carriage services

Under section 315 of the Act, a senior police officer of a police force or service who holds a rank not lower than the rank of 'Assistant Commissioner' can request the suspension of a carriage service if there is an imminent threat to someone's life or health. CSPs reported the suspension of 27 carriage services in 2012–13 under section 315 of the Act.

Interception

The content of communications between users of telecommunications services is strictly protected in Australia as one of the most crucial areas of privacy protection. Interception may only be authorised by law enforcement and national security agencies in accordance with a warrant under the TIA Act. Interception for other purposes is prohibited, with criminal penalties applicable for breaches of the TIA Act.

Cost of providing assistance

Section 314 of the Act applies if a person is required to provide help to an agency. Such persons must comply with a requirement on the basis that the person neither profits from, nor bears the costs of, giving that help.

Chapter 5 of the TIA Act obliges carriers and CSPs to ensure that their networks, facilities and carriage services are capable of enabling communications to be intercepted upon presentation of an interception warrant.[1] This obligation includes a requirement to develop, install and maintain an interception capability. Under section 207 of the TIA Act, carriers and CSPs are responsible for the costs associated with providing interception capability in their representative networks.

In 2012–13, the cost to industry of providing interception capability was $18.4 million (Figure 2.2), an increase of nine per cent from 2011–12.

Figure 2.2 Cost of providing interception capabilities
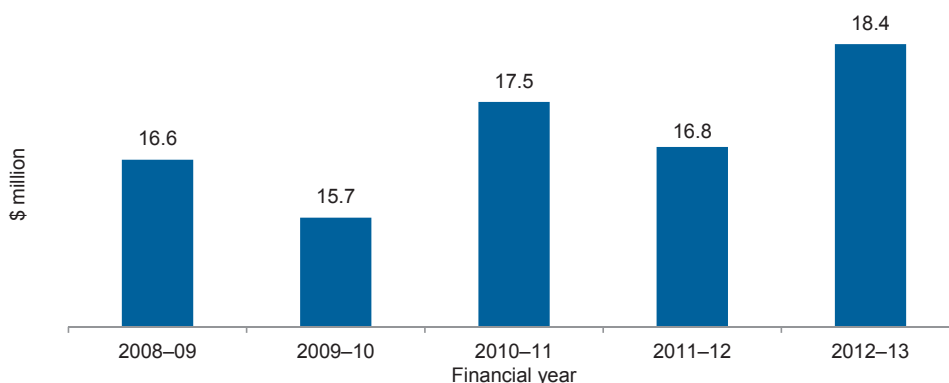
Source: ACMA annual industry data request.

Interception capability plan compliance

Under sections 196 and 197 of the TIA Act, carriers and nominated CSPs must lodge an interception capability plan by 1 July each year with the Communications Access Co-ordinator in the AGD.[2] The ACMA's role is to enforce this obligation.

Compliance with this obligation was high during the reporting period. Of the active licensed carriers, seven failed to provide their interception capability plan by the due

date or shortly after. AGD referred these seven carriers to the ACMA for enforcement action. All carriers subsequently complied with their obligations.

Interception exemption for trial services

Section 193 of the TIA Act facilitates the opportunity for service providers to trial new services prior to committing expenditure on interception capability. The ACMA can grant an exemption from the obligation to provide interception capability if, after consulting with appropriate interception agencies, it is satisfied that the exemption is unlikely to create a risk to national security or law enforcement.

During the reporting period, the ACMA granted two exemptions under section 193 of the TIA Act in relation to a single trial. Both exemptions were subject to conditions set out in the exemptions. The trial expired on 31 July 2013.

Role of the Integrated Public Number Database

The Integrated Public Number Database (IPND) is an industry-wide database of all listed and unlisted telephone numbers and associated customer information, including customer name and address and the name of each customer's CSP. Under its carrier licence conditions, the IPND Manager is Telstra.

Telstra reported that the IPND contained 64.12 million connected records at 30 June 2013, an increase of three per cent on the 62.05 million records held one year previously.

Investigations into CSP compliance with IPND requirements

During the reporting period, the ACMA conducted five investigations into whether CSPs complied with their obligations to provide accurate customer data to the IPND. The ACMA requested a sample of records from the IPND Manager for the CSPs to ascertain whether the records contained in the IPND matched those held by the CSPs. While four of the CSPs investigated achieved a compliance level of 90 per cent or above for name and address data, the investigation on one CSP was not concluded during the reporting period.

Handling of life-threatening and unwelcome communications industry code

The C525:2010 Handling of Life Threatening and Unwelcome Communications industry code sets out obligations on carriers, CSPs and the NRS provider in responding to requests from customers and police to resolve life-threatening situations and unwelcome communications.

During the reporting period, the TIO confirmed that there were no code breaches and that new complaint issues under this code declined by 11 per cent to 534 in the reporting period.

Submarine cable protection

Australia currently has three submarine cable protection zones—two off the Sydney coast and one off the Perth coast. At present there are nine submarine cables connecting Australia to seven countries—Fiji, Guam, Indonesia, New Caledonia, New Zealand, Papua New Guinea and the United States.

In 2012–13, no installation permits (protection zone or non-protection zone) were granted, while one submarine cable non-protection zone application was received and is under consideration. One extension to a protection zone permit was granted by the ACMA on 13 June 2013. In 2011–12, two submarine cable installation permits were granted.

In the reporting period, the ACMA has not considered any changes to the present submarine cable protection zones or declaring any new zones.

A number of submarine cable projects were reported by the media in 2012–13 and this may give rise to permit applications in the next year.

Radiofrequency interference complaints

Under the *Radiocommunications Act 1992* (the Radiocommunications Act), the ACMA investigates complaints about radiofrequency interference to licensed radiocommunications equipment and services. Interference can be classified as either domestic systems or radiocommunications interference.

Domestic systems interference

Domestic systems interference (DSI) refers to interference to the reception of radio or television broadcasting, usually in domestic premises. It also encompasses audio interference caused by nearby radio transmitters, such as those used by citizen band or amateur radio operators, or from other radio services with a transmitter located nearby.

During 2012–13, complaints of interference to terrestrial digital television services continued to outnumber other DSI complaints. Masthead and distribution amplifiers (associated with television antenna installations) and household equipment (excluding computers) continues to be the major contributing sources of DSI.

Fourteen per cent of DSI complaints required compliance action by the ACMA in 2012–13 (Figure 2.3). The remainder were resolved without requiring compliance action.

Figure 2.3 Domestic systems interference complaints and compliance actions

Source: Domestic system interference complaints to the ACMA.

Radiocommunications interference

Radiocommunications interference (RCI) is interference affecting a radiocommunications receiver used for non-broadcasting purposes such as public safety, commercial and recreational services.

During 2012–13, mobile telephone services continued to be more affected by interference than any other type of service.

The number of complaints received during 2012–13 was 17 per cent higher than complaints received in 2011–12 (Figure 2.4). Radiocommunications transmitters continue to be the significant source of interference. During the reporting period, there was an increase in compliance actions involving issuing advice and warning notices. In general, these compliance actions were effective and required no further action. One matter was referred to the Commonwealth Director of Public Prosecutions.

Figure 2.4 Radiocommunications interference complaints and compliance actions
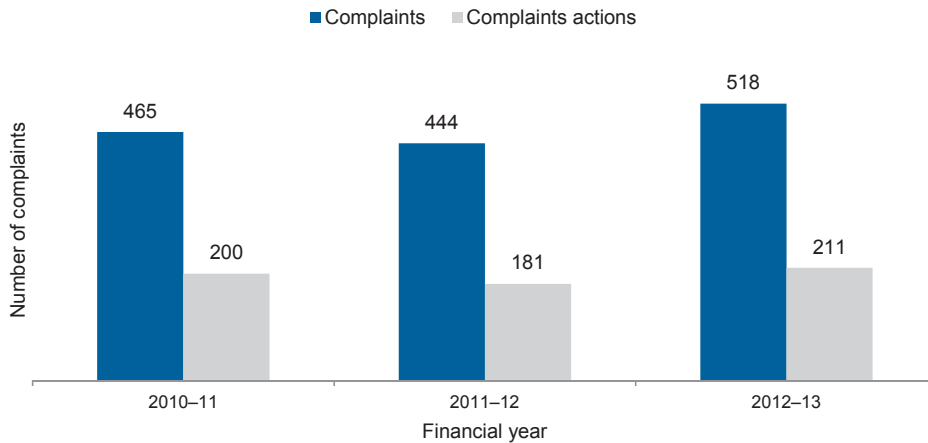
Note: *Not every complaint requires a compliance action as the complaint may not exist or is fixed immediately on the spot. Only the more serious complaints involve a compliance action.*
Source: The ACMA.

Further information, including the number and type of affected services, sources of interference, cause and remedies and ACMA enforcement actions is available on the ACMA's website www.acma.gov.au.

Endnotes

[1] The definition of a carrier under section 5 of the TIA Act includes CSPs for these provisions.
[2] Nominated CSPs include those covered by a declaration in force under section 197 of the TIA Act.

Chapter 3
Telecommunications consumer safeguards and quality of service

Overview

Chapter 3 presents analysis and information about the telecommunications industry's performance in meeting key regulatory obligations. Areas of compliance examined within this chapter relate to each of the following: the Telecommunications (Customer Service Guarantee) Standard 2011 (CSG Standard); the Network Reliability Framework (NRF); priority assistance; number portability and telemarketing and spam investigations. Industry compliance with telecommunications codes, trends in TIO complaints and the ACMA's consumer satisfaction research are also examined.

Key developments in relation to these matters during 2012–13 included:

> declines in the total number of payphones and the number of fixed-line services covered by the CSG Standard

> increase in the number of occasions where customers waived their rights under the CSG Standard (iiNet received a majority of these waivers)

> increase in the amount of compensation payments to customers as a result of failing to meet CSG Standard time frames

> major carriers meeting CSG Standard time frames for new service connections in most cases

> an increase in the number of local numbers ported and a decline in the number of mobile numbers ported

> an increase in the number of participants on the DNCR

> a decline in the average number of automated daily reports provided to ISPs about infected computing devices residing on their networks

> a decline in complaints to the ACMA regarding potential breaches of the DNCR Act and a decline in complaints to the TIO

> overall satisfaction levels were marginally higher for fixed-line telephone and internet users than mobile phone and VoIP users.

Fixed-line consumer safeguards

Amendments to telecommunications legislation during 2010 introduced new powers. They included strengthening the protections offered by the Universal Service Obligation (USO) and the customer service guarantee (CSG), to enable the ACMA to continue to protect consumers in the transition to the NBN, to maintain and improve service quality and to ensure continued access to basic voice services.

In the previous reporting period, the CSG performance reporting was consistent with the approach applied previously, rather than fully reflecting the new benchmark obligations—for reasons outlined in the ACMA *Communications report 2011–12.* In 2011–12, an assessment of compliance was undertaken by the ACMA, with no breaches being found. While no enforcement action was considered appropriate, Telstra was advised that the ACMA would continue to monitor compliance with CSG benchmarks closely under the new arrangements.

For the period 2012–13, the ACMA assessed the compliance of four qualifying carriage service providers (QCSPs) (Telstra, Optus, Primus and iiNet) against the CSG benchmarks.[1] Telstra's compliance against the payphone benchmarks was also assessed. Based on the CSG and payphone record-keeping rule compliance data provided to the ACMA, Optus, iiNet and Primus met all of the CSG benchmark requirements and Telstra met all payphone benchmark requirements. However, Telstra did not meet two of the nine annual CSG benchmarks—new connection of services in urban areas and remote areas nationally.

To ensure the delivery of universal service outcomes and public interest telecommunications services during and after the transition to the NBN, the Telecommunications Universal Service Management Agency (TUSMA) was established in 2012 under the *Telecommunications Universal Service Management Agency Act 2012* (TUSMA Act). TUSMA commenced operations from 1 July 2012. TUSMA manages contracts and grants to support the delivery of USO services, being the standard telephone service and payphones, as well as other public interest telecommunications services such as emergency call person services and the NRS.

During 2012–13, the ACMA provided advice and assistance to the Department of Broadband, Communications and the Digital Economy (now the Department of Communications) and TUSMA in setting up the legislative, policy and procedural arrangements to deliver public policy outcomes. These services and TUSMA's costs to deliver them are part funded by the government, with the remainder shared by telecommunications carriers that earn above $25 million, through applying the telecommunications industry levy (TIL). The TIL replaces the USO and NRS levies, which were charged to carriers for the last time during the 2012–13 financial year for the purposes of the 2011–12 eligible revenue period. Under the TUSMA Act, the ACMA has an ongoing statutory role to undertake the assessment, collection and recovery of the levy imposed by the *Telecommunications (Industry Levy) Act 2012* from the 2012–13 eligible revenue period (to be paid in the 2013–14 financial year) onwards.

The TIL and other public policy outcomes

The TIL funds the residual costs (after government funding) of activities undertaken by TUSMA. In particular, this levy provides for:

> reasonably accessible standard telephone services and payphone services to all Australians on an equitable basis, regardless of where they live or carry on business (the USO for voice telephony services and the USO for payphones)

> a national telephone service to enable people who are deaf or have a hearing and/or speech impediment to make and receive telephone calls (the NRS)

> delivery of emergency call person services

> delivery of other public policy telecommunications outcomes.

The ACMA is responsible for the billing and collection of the TIL, while TUSMA manages the contractual arrangements and service provider payments. This provides greater transparency in this process.

Industry levies and payments

The ACMA manages the assessment and collection of levies over a three-year cycle.

Eligible Revenue Period (ERP) 2011–12	Eligible Levy Period (ELP) 2012–13	Financial year 2013–14
Period in which eligible revenue is earned	Period in which eligible revenue return is lodged and assessed	Period in which payment is made by Participating Persons for eligible revenue earned in ERP

The TIL amount of a carrier licence holder, who was a participating person under the TUSMA Act, is the amount which that person must contribute to the cost of funding TUSMA. Contributions are, in general, proportional to that participating person's share of the industry's total eligible revenue for the relevant eligible revenue period.

For the delivery of TIL and other public policy telecommunications outcomes during the 2012–13 eligible levy period (ELP), the assessed eligible revenue of participating persons, will be used to calculate the amount of TIL and annual carrier licence charges (ACLC). The TIL will be invoiced to participating persons in the 2013–14 financial year.

ACLC are imposed under the *Telecommunications (Carrier Licence Charges) Act 1997* and payable by participating persons. The ACLC was invoiced to participating persons in the 2012–13 financial year.

Final TIL assessment

Following advice from the ACMA, the minister determined the amount of the 2012–13 TIL as $254.9 million. This amount differs significantly to previous years as the scope of the levy has changed. The final TIL for the 2012–13 ELP is $254,927,064.42, which will be invoiced and collected during the 2013–14 financial year.

There were 206 carriers and 52 participating persons assessed for the 2012–13 ELP. Fourteen were assessed as having nil eligible revenue and were not required to contribute to the TIL. The levy payable by the remaining participating persons ranged from $52 to $155.6m.

Table 3.1 below sets out the TIL liabilities of participating persons (in excess of $1m) and now includes Telstra, as it is required to pay its levy to the ACMA, rather than the offset arrangements of previous years.

As a transitional arrangement, the Commonwealth has contributed $34,108,165.93 to 'cap' the total non-Telstra contribution to 2012–13 TIL at the same total amount paid by them for the previous year's USO and NRS levies.

Table 3.1 Levies payable (in excess of $1m, and net of government contribution) for participating persons, 2012–13 levy period (payable in the 2013–14 financial year)

	Sub-total	Levy ($)
Telstra		
Telstra Corporation Limited	155,620,463.33	
Telstra Multimedia Pty Limited	1,829,416,73	157,449,880.06
Optus		
Optus Mobile Pty Limited	26,928,222.73	
Optus Networks Pty Limited	8,578,503.35	35,506,726.08
Vodafone		
Vodafone Australia Pty Limited	10,988,277.22	
Vodafone Hutchison Australia Pty Limited	6,057,728.02	17,046,005.24
AAPT		1,375,103.37
Chime Communications Pty Ltd		1,275,842.92

Source: The ACMA.

Public payphones

Payphone services in Australia are provided on either a commercial basis or as part of the USO. Telstra is the current primary universal service provider (PUSP) for payphones and from 1 January 2012, it must comply with payphone performance standards and benchmarks made by the minister under the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (the TCPSS Act).

The ACMA monitors Telstra's payphone performance and also receives information about the number of payphones supplied or operated on a commercial basis by other providers.

Numbers of payphones and payphone sites

During 2012–13, the total number of payphones (both Telstra-operated and privately operated) in Australia fell by five per cent from 31,032 to 29,523. This comprised:

> a net decrease of 1.2 per cent in the number of Telstra-operated payphones, from 18,246 to 18,035

> a net decrease of 10.2 per cent in the number of privately operated payphones, from 12,786 to 11,488.

During the reporting period, there was a decrease of 0.4 per cent in the number of Telstra-operated payphone sites, from 14,991 to 14,938 (noting some sites have more than one payphone). At 30 June 2013, 61.1 per cent of payphones were operated by Telstra. The remaining payphones were provided by other telecommunications companies, such as TriTel Australia Pty Ltd (the second-largest provider of payphones) or other businesses, such as hotels, clubs and convenience stores.

Figure 3.1 shows that the total number of Telstra-operated and non-Telstra-operated payphones has decreased over the past five reporting periods, while the annual number of payphone removals has also generally declined over the same period. The net annual reduction in Telstra-operated payphones has reduced over this period from 1,666 payphones in 2009–10 to 304 payphones in 2010–11, 467 payphones in 2011–12 and 211 payphones in 2012–13.

Figure 3.1 Number of payphones in operation

■ Telstra-operated   ■ Non-Telstra-operated*
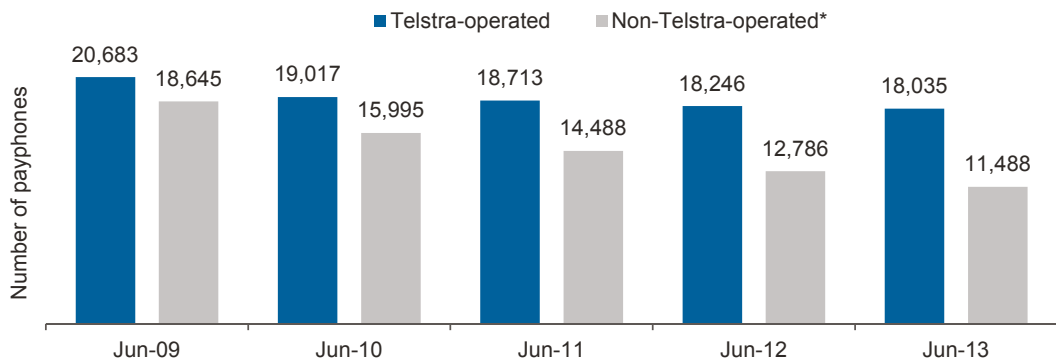
Includes TriTel payphones and payphones provided via Telstra access lines.
Source: Telstra and TriTel.

Table 3.2 provides the geographic distribution of Telstra payphones and payphones provided via Telstra access lines as at 30 June 2013.

Table 3.2 Distribution of Telstra payphones by geographical category, 30 June 2013

	Urban	Rural	Remote*	RIC
Telstra-operated payphones	12,363 (68.6%)	4,777 (26.4%)	895 (5.0%)	592 (3.3%)
Other payphones (provided via Telstra access lines)	8,252	2,022	403	254

RIC=Remote Indigenous communities.
*Including RIC.
Note: Excludes TriTel payphones
Source: Telstra.

Payphone fault repair performance

Timely repair of payphone faults is an important component of the equitable provision of payphone services under the USO.

From 1 January 2012, regulatory benchmarks were put in place for Telstra's performance in remediating faults under the Telecommunications Universal Service Obligation (Payphone Performance Benchmarks) Instrument (No. 1) 2011 (Payphone Performance Benchmarks). These benchmarks relate to performance against standards for the repair of payphones. The time frames vary according to the location of the service—one working day for urban locations, two for rural and three for remote locations (including remote Indigenous communities).

Table 3.3 shows Telstra's national performance in repairing faults for 2012–13 against the payphone fault repair performance benchmarks detailed in the Payphone Performance Benchmarks. Failure to meet a benchmark under this instrument may result in the ACMA taking compliance action.

Table 3.3 Telstra payphone fault repair performance, 2012–13

	Urban	Rural	Remote*
Payphone fault repair benchmark	90.0%	90.0%	80.0%
Fault repair performance	96.1%	96.2%	88.7%

*Including RIC.
Source: Telstra.

Installation of payphones

Under the Telecommunications Universal Service Obligations (Location of Payphones) Determination 2011, communities or members of the public can apply for installation of a Telstra-operated payphone in a public place. During 2012–13, there were 53 such applications, of which 50 (94 per cent) were accepted by Telstra.

Payphone removals

Table 3.4 shows the number of Telstra payphones removed from service, the number of installations and the number of proposed removals cancelled by Telstra during 2012–13. All removals, where the payphone is the last remaining payphone at the site, are only undertaken after public consultation or after the withdrawal of the property owner's consent to retain the payphone at a site.

Table 3.4 Telstra payphone removals and installations, 2012–13

	Urban	Rural	Remote*	Total
Telstra payphones removed	275	22	28	325
Telstra payphones installed	105	6	3	114
Cancellation of proposed payphone removals	2	2	0	4

*Including RIC.
Source: Telstra.

Payphones for people with disabilities

At 30 June 2013, Telstra had 151 teletypewriter payphones in operation in metropolitan and regional areas, a decrease of two from the previous year.

Customer Service Guarantee Standard

The CSG Standard sets minimum service standards for CSPs in installing and repairing standard telephone services and meeting appointments for residential and small business customers. A CSP is exempt from complying with a performance standard for a service if the CSP supplies a customer with more than five services. If a CSP fails to meet the minimum performance standards, compensation may be payable to the customer.

In addition, formal CSG performance benchmarks commenced on 1 October 2011. These benchmarks are established by the Telecommunications (Customer Service Guarantee – Retail Performance Benchmarks) Instrument (No. 1) 2011 and apply to the qualifying carriage service providers.

The CSG performance benchmarks are set at 90 per cent for:

> new connections in urban, major rural, minor rural and remote areas (national)
> in-place connections in all areas (national)
> fault rectifications in urban, rural and remote areas (national)
> appointment-keeping in all areas (national).

If a CSP fails to meet a CSG performance benchmark, the ACMA may take compliance action, including the option to issue the CSP with an infringement notice in certain circumstances.

At 30 June 2013, there were 6.68 million services subject to the CSG Standard, compared to 7.12 million at 30 June 2012—a decline of 6.1 per cent (Table 3.5). This decline may have resulted from the growth in the number of consumers without a fixed-line telephone service in the home and consumers using voice services provided by VoIP (see Chapter 1). Services subject to the CSG Standard accounted for approximately 65 per cent of all fixed-line telephone services in Australia at June 2013 compared with 66 per cent at June 2012.

At June 2013, there were 247,657 occasions nationally where customers of the major CSPs waived their rights under the CSG Standard, an increase of nine per cent since June 2012. At June 2013, iiNet accounted for the majority of waivers (98.8 per cent).

Table 3.5 Services subject to the CSG Standard by provider, at 30 June

	2009 ('000)	2010 ('000)	2011 ('000)	2012 ('000)	2013 ('000)
iiNet	n/a	n/a	370*	493	418
Optus	915	949	930	913	850
Primus	n/p	127	115	103	101
Telstra	6,281	6,038	5,828	5,608	5,314
Other	292	242	43	0	0
Total	**7,488**	**7,356**	**7,286**	**7,117**	**6,683**

n/a=not applicable. n/p=not provided.
*iiNet acquired AAPT's Consumer Division on 1 October 2010.
Source: CSP data.

Table 3.6 sets out the CSG Standard time frames within which service providers must connect telephone services and complete fault repairs. The CSG Standard time frames vary according to the location of the customer and, in the case of connections, whether infrastructure is readily available and whether there is an existing in-place connection.

Table 3.6 CSG Standard time frames (working days)

Community	In-place connection	New service connection		Fault repair
		Close to infrastructure	Not close to infrastructure	
Urban	2	5	20	1
Major rural	2	10	20	2
Minor rural	2	15	20	2
Remote	2	15	20	3

Note: 'Urban' is defined as communities with 10,000 or more people, 'major rural' is defined as communities with between 2,500 and 10,000 people, 'minor rural' is defined as communities with between 200 and 2,500 people, 'remote' is defined as communities with up to 200 people.
Source: CSG Standard.

Connections

In 2012–13, the performance of the major CSPs in meeting CSG Standard time frames for new service connections nationally was 89.0 per cent (Telstra), 98.5 per cent (Optus), 94.4 per cent (iiNet) and 100 per cent (Primus). Table 3.7 shows CSP performance in 2012–13 in meeting CSG Standard time frames for new service connections and for in-place service connections. Any compliance action for non-compliance with annual performance benchmarks is considered by the ACMA after the reporting period.

A 'new service connection' is the connection of a standard telephone service to premises where there is the need for additional work to be completed (for example, cabling) before a service can be connected. This excludes in-place service connections where there has been a previous working CSG service that is available for reconnection or reactivation by the CSP.

Table 3.7 Percentage and number of new service and in-place connections provided within CSG Standard time frames, 2012–13

	iiNet		Optus		Primus		Telstra	
	%	No.	%	No.	%	No.	%	No.
New service connections								
Urban areas	94.4%	53,097	98.5%	161,956	100%	2,881	88.6%	253,044
Major rural areas	95.4%	2,249	100%	170	100%	115	91.6%	25,668
Minor rural areas	92.6%	1,235	100%	108	100%	131	90.4%	20,410
Remote areas	99.1%	106	100%	6	100%	1	89.0%	701
All areas	94.4%	56,867	98.5%	162,240	100%	3,128	89.0%	299,823
In-place service connections								
All areas	97.7%	67,322	n/a	n/a	100%	8,853	93.8%	321,987

n/a=not applicable.
Note: During 2012–13, qualifying CSPs were required to record the number of requests that were not complied with within the applicable performance time frames and to identify if the CSP's failure to do so was wholly or partly attributable to one or more acts or omissions by another CSP.
Source: CSP data.

Appointments

During 2012–13, Telstra made 389,972 CSG Standard-related appointments and did not meet 2.7 per cent (or 10,346) within the CSG Standard appointment-keeping time frames. During the same period, Optus did not meet four per cent of appointments, iiNet did not meet 0.2 per cent of appointments and Primus met all appointments. Table 3.8 shows CSP performance in 2012–13 in meeting CSG Standard for appointment-keeping time frames.

Fault repairs

In 2012–13, the performance of the major CSPs in meeting CSG Standard time frames for fault repairs nationally was 90.9 per cent (Telstra), 96.9 per cent (Optus), 91.3 per cent (iiNet) and 98.5 per cent (Primus).

Table 3.8 Percentage and number of faults repaired within CSG Standard time frames and appointment-keeping performance, 2012–13

	iiNet		Optus		Primus		Telstra	
	%	No.	%	No.	%	No.	%	No.
Fault repairs								
Urban areas	91.5%	46,475	96.9%	147,896	98.4%	22,186	90.6%	629,391
Rural areas	90.1%	7,568	99.2%	309	99.9%	2,625	91.7%	215,238
Remote areas	100%	75	100%	2	100%	6	92.3%	3,126
All areas	91.3%	54,118	96.9%	148,207	98.5%	24,817	90.9%	847,755
Appointments (new service connections and fault repair)	99.8%	8,636	96.0%	64,524	100%	10,740	97.3%	379,626

Note: During 2012–13, qualifying CSPs were required to record the number of requests that were not complied with within the applicable performance timeframes and to identify if the CSP's failure to do so was wholly or partly attributable to one or more acts or omissions by another CSP.
Source: CSP data.

Table 3.9 shows CSP performance in 2012–13 in meeting CSG Standard time frames for fault repairs.

Table 3.9 Number of new service connections, in-place connections and fault repairs requested at the national level and appointment-keeping performance, 2011–12 and 2012–13.

	iiNet		Optus		Primus		Telstra	
	2012	2013	2012	2013	2012	2013	2012	2013
New service connections	48,493	60,232	181,724	165,099	2,964	3,223	342,750	336,944
In-place connections	87,766	68,964	n/a	n/a	8,279	8,937	440,750	343,274
Fault repairs	78,559	63,436	176,349	163,425	22,967	26,001	1,008,832	933,052
Appointments (new service connections and fault repair)	n/p	8,657	66,816	67,214	n/p	10,814	450,972	389,972

n/p=not provided. n/a=not available.
Source: CSP data.

CSG Standard payments

As a result of failing to meet CSG Standard time frames during 2012–13, CSPs made compensation payments to customers as shown in Table 3.10.

Table 3.10 Volume and value of compensation payments made by CSPs to customers, 2011–12 and 2012–13.

	2011–12		2012–13	
	Volume	$ (million)	Volume	$ (million)
iiNet	6,725	0.52	9,504	0.80
Optus	20,701	0.62	20,767	0.92
Primus	826	0.06	1,411	0.03
Telstra	137,348	4.57	143,294	6.14
Total	165,600	5.77	174,976	7.89

Note: During 2012–13, qualifying CSPs were required to record the number of requests that were not complied with within the applicable performance timeframes and to identify if the CSP's failure to do so was wholly or partly attributable to one or more acts or omissions by another CSP.
Source: CSP data.

Payments totalled $7.89 million for 2012–13, compared to a total of $5.77 million made during 2011–12—an increase of 37 per cent.

Exemptions from the CSG Standard

A CSP is exempt from complying with a performance standard in certain situations that are specified in Part 3 of the CSG Standard. For example, a CSP may be exempt from compliance with the CSG Standard for the period when circumstances beyond its control affect its ability to comply with the CSG Standard. A CSP also may be exempt if there is a need to move staff or equipment to an area affected by circumstances beyond its control. Many exemptions are a result of extreme weather events or natural disasters.

CSPs must notify affected customers of an exemption. The CSP can choose to notify customers either individually or publicly (via a public notice published in a newspaper circulating in the affected area). If a CSP's performance is exempt as a result of extreme weather conditions, the notice must identify evidence that the extreme weather conditions outlined in the notice meet the definitions set out in the CSG Standard. The numbers of exemptions for the major CSPs for 2012–13 are shown in Table 3.11.

The number of CSG exemptions claimed in 2012–13 is similar to that claimed in previous years. However, the number of services estimated to be affected and the duration for which CSG exemptions applied increased in 2012–13 compared to previous years, as a result of significant weather events during 2012–13.

Table 3.11 Numbers of CSG exemptions for the major CSPs, 2012–13

Reason for exemption	Eftel group	iiNet group	Optus	Dodo	Telstra	M2 Group	Primus*
Extreme weather conditions	34	42	39	27	42	21	2
Natural disasters	3	3	3	3	3	1	0
Other	7	7	7	7	7	7	0
Total	**44**	**52**	**49**	**37**	**52**	**29**	**2**

*Primus was acquired by the M2 Group, effective 1 June 2012. Since December 2012, Primus exemption notifications have been included in M2 Group notifications.
Source: CSP data.

Network Reliability Framework

The ACMA monitors the reliability of Telstra's fixed-line telephone service network under the NRF. Compliance with the NRF is a condition of Telstra's carrier licence. The NRF applies only to services Telstra provides to its CSG Standard-eligible customers—residential and small-business fixed-line customers with no more than five telephone services. Telstra is required to report to the ACMA on the performance of its network and to fix poorly performing cable runs and individual services, as triggered.

The NRF requires monitoring and/or remedying network reliability performance at three levels:

> 1—National and geographical area level, based on Telstra's 44 field service areas (FSAs)

> 2—Local level, cable runs in disaggregated parts of the network

> 3—Individual service level, which includes all Telstra services covered by the CSG Standard.

Level 1 is designed to inform the public about overall network reliability performance. Under levels 2 and 3, Telstra is required to remediate poorly performing parts of its network as a priority.

Level 1—national and field service area performance

Level 1 of the NRF requires Telstra to publish monthly data showing the reliability of services nationally and in 44 FSAs across Australia. Telstra's national Level 1 performance data is presented in Figure 3.2. The reliability measures under this level are:

> Level 1(a)—the percentage of CSG Standard services that did not experience a fault during the month reported

> Level 1(b)—the percentage of time in a month that CSG Standard services, on average, are available.

The ACMA also uses data provided under Level 1 of the NRF to calculate:

> Level 1(c)—the average time (in hours) for fault-affected CSG Standard services to be repaired for the month (Figure 3.3).

Figure 3.2 Telstra's Level 1(a) and (b) performance, based on monthly reports
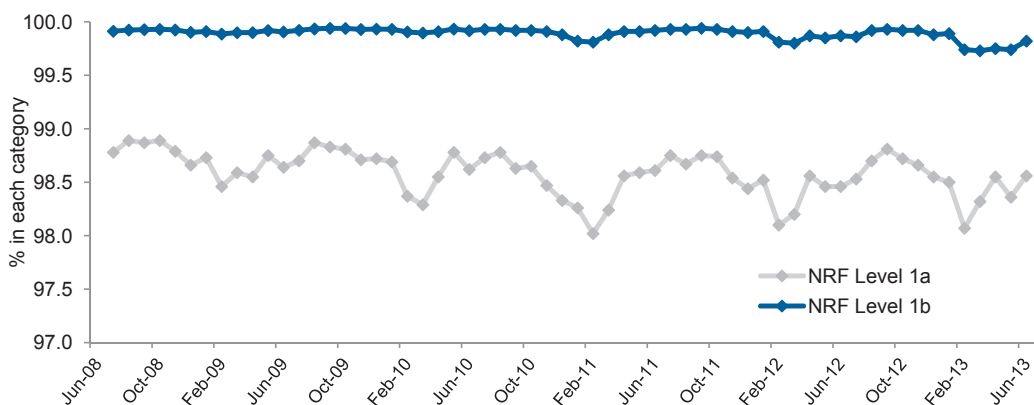
Source: The ACMA, Telstra.

During 2012–13, Telstra experienced an increase in fault activity during the summer months that can be partly attributed to extreme weather events occurring across various parts of Australia (in particular Queensland and New South Wales). While the percentage of fault-free services remained above 98 per cent for each month during 2012–13, it should be noted that small changes in this figure represent relatively large changes in the number of faults occurring on the network.

Under Level 1(a), FSAs in urban areas experienced a slightly lower percentage of faults than those in non-urban areas. On average, 1.44 per cent of services experienced a fault in any given month in urban areas, while this figure was 1.52 per cent in non-urban areas. Figure 3.2 shows the cyclical nature of NRF Level 1(a) performance.

Level 1(b) measures the percentage of time in a month that services (on average) are available; that is, not awaiting repair. The performance is calculated based on the total amount of time associated with fault repairs and then averaged across all services, whether or not they had a fault in the relevant month. In 2012–13, services were available, on a monthly average, 99.84 per cent of the time (nationally), whereas in 2011–12 services were available, on a monthly average, 99.89 per cent of the time (nationally).

Level 1(c) measures the average number of hours Telstra took to restore fault-affected services in the month. While Level 1(b) takes into account all services, Level 1(c) only considers services that experienced a fault.

Figure 3.3 Level 1(c)—average time for Telstra to restore fault-affected services
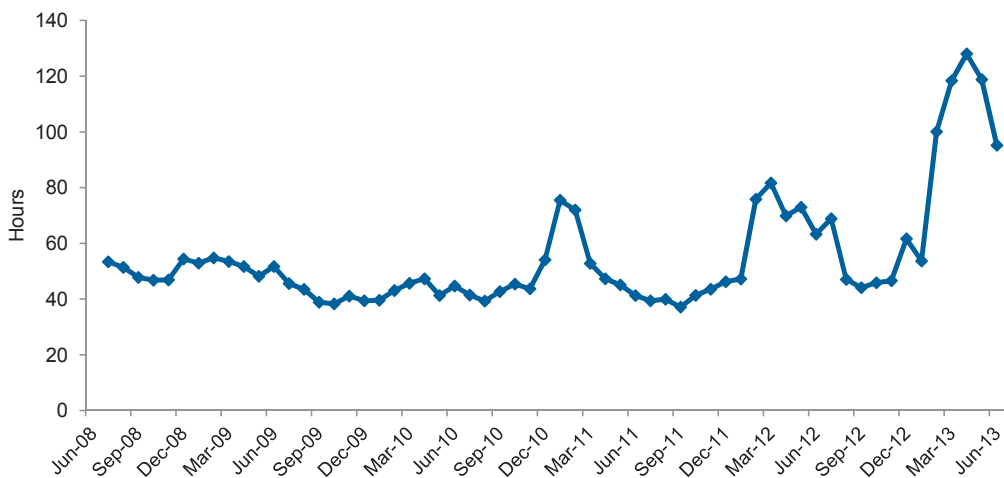
Source: Telstra.

Performance for Level 1(c) indicates that the average time taken to restore fault-affected services increased during 2012–13 compared with previous years. In terms of elapsed time, it took an average of 80 hours to restore services that had a fault in 2012–13 compared to an average of 56 hours in 2011–12. As in previous years, CSG Standard services affected by faults in urban areas usually experienced lower average downtime hours compared to non-urban areas. In terms of elapsed time, it took an average of 76 hours to restore fault-affected services in urban areas and 85 hours in non-urban areas. This compared with 52 hours to restore fault-affected services in urban areas and 63 hours in non-urban areas in 2011–12.

Performance across Level 1(c) has remained relatively stable since June 2008, with the exception of three notable spikes relating to significant severe weather events and natural disasters that affected eastern Australia at these times. Notwithstanding the cyclical nature of these spikes, the time taken to restore fault-affected services has been abnormally high over the period January 2013 to June 2013. For the period January to June, the average time for Telstra to restore fault-affected services has increased as follows:

> January to June 2010: 43.8 hours
> January to June 2011: 57.1 hours
> January to June 2012: 69.2 hours
> January to June 2013: 102.5 hours.

Level 2—local cable run remediations

Level 2 of the NRF requires Telstra to report on and undertake remediation work on the 40 poorest performing cable runs (a set of 10 or 100 copper wire pairs within a physical cable sheath) each month.

During 2012–13, Telstra completed remediation and monitoring of 483 cable runs, some of which were identified for remediation in previous reporting periods. For the year, Telstra identified the required 480 cable runs to be remediated. Telstra also remediated an additional 208 cable runs associated with the reported cable runs, significantly more than in 2011–12 when it remediated an additional 121 cable runs. Telstra estimated that remediation work undertaken as part of Level 2 of the NRF in 2012–13 improved the reliability of 24,893 services.

Level 3—individual service performance

Telstra is required to take action to prevent an individual CSG Standard-eligible service from experiencing more than either:

> three faults in a rolling 60-day period—NRF Level 3(a)
> four faults in a rolling 365-day period—NRF Level 3(b).

Telstra is required to report to the ACMA any services that breach these thresholds, investigate the performance of the service and undertake necessary remediation.

Figure 3.4 shows that the number of services experiencing four or more faults in a rolling 60-day period or five or more faults in a rolling 365-day period varies significantly from month to month.
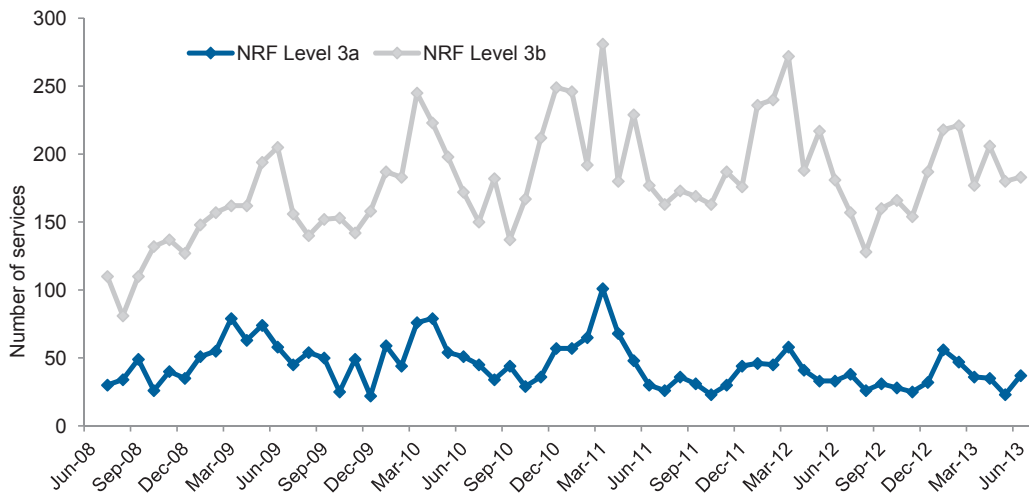
Source: Telstra.

Telstra has reported a slight decrease in the number of services experiencing breaches of the 60-day threshold, reporting 35 breaches per month (on average) in 2012–13 and a total of 414 for the year. In 2011–12, Telstra reported an average of 37 breaches per month and a total of 446 for the year.

Telstra also reported a slight decrease in the number of services experiencing breaches of the 365-day threshold, with 178 breaches per month (on average) and a total of 2,137 for 2012–13. This compares to 2011–12 where Telstra reported 197 breaches per month (on average) and a total of 2,365 for the year.

Telstra is required to remediate any service that breaches the fault thresholds and then monitor that service for an eight-month period. If a service experiences another fault during the monitoring period (known as a monitoring period fault), Telstra must report this to the ACMA together with an assessment as to whether the fault is related or unrelated to the original fault(s) that caused the contravention. In 2012–13, Telstra reported 691 monitoring period faults (across 589 individual services) and assessed 19 faults as related to the original contravention. In 2011–12, Telstra reported 811 monitoring period faults (across 685 individual services) and assessed 17 faults as related to the original contravention.

Each service reported under Level 3 is required to undergo remediation. Telstra is required to report to the ACMA on the expected date for completion of the remediation and to report on a quarterly basis any services where remediation has not been completed within the expected time frames. In 2012–13, Telstra reported 659 delays to remediation (that is, where remediation was not completed within the expected time frames), with an average reported delay to remediation of 133 days. Some services were reported as experiencing more than one delay.

Priority assistance

Priority assistance is the priority telephone connection and repair service for people with a diagnosed life-threatening medical condition who are at risk of suffering a rapid and life-threatening deterioration in their condition. Telstra must offer the service as a requirement of its carrier licence conditions. Other CSPs may offer priority assistance services but are not obliged by regulation to do so. In 2012–13, Primus was the only CSP to voluntarily offer priority assistance services in line with industry code ACIF: C609:2007 Priority Assistance for Life Threatening Medical Conditions.

The number of priority assistance customers is presented in Table 3.12. During 2012–13, the number of priority assistance customers increased by 16 per cent.

Table 3.12 Number of priority assistance customers, at 30 June

	2009	2010	2011	2012	2013
Telstra					
Total	195,173	210,462	188,974	221,350	256,549
Provisional	73,426	85,587	54,152	91,009	144,435
Validated	121,747	124,875	134,822	130,341	112,114
iiNet					
Total	n/a	n/a	2,417*	7[†]	0
Provisional	n/a	n/a	49	0	0
Validated	n/a	n/a	2,368	7	0
Primus					
Total	1,515	579	819	209	588
Provisional	n/p	63	55	23	54
Validated	n/p	516	764	186	534
Total	196,688	211,041	192,210	221,566	257,137

n/a=not applicable.
n/p=not provided.
*iiNet acquired AAPT's Consumer Division on 1 October 2010.
[†]iiNet notified the ACMA in March 2012 that it would cease offering a priority assistance service.
Source: Telstra, iiNet, Primus.

Priority assistance customers are given faster connections and fault repairs of their fixed-line telephone service. A service must be connected or a fault repaired within 24 hours in urban and rural areas or 48 hours in remote areas. Table 3.13 provides information about the performance of Telstra, iiNet and Primus in meeting priority assistance time frames for connections and fault repairs since 2008–09.

Table 3.13 Priority assistance—percentage of connection and fault restoration requests completed on time, by financial year
(Volumes completed on time for Telstra are shown in brackets for 2011–12 and 2012–13)

	Connection requests					Fault restoration requests				
	2008 –09	2009 –10	2010 –11*	2011 –12†	2012 –13	2008 –09	2009 –10	2010 –11*	2011 –12†	2012 –13
Telstra										
National	88%	92%	93%	92% (40,881)	93% (42,700)	93%	92%	93%	95% (130,946)	96% (155,378)
Urban	88%	92%	94%	92% (30,618)	93% (32,536)	94%	93%	94%	96% (95,586)	97% (114,800)
Rural	88%	92%	93%	92% (9,970)	93% (9,886)	90%	89%	90%	92% (34,855)	92% (40,045)
Remote	85%	90%	89%	84% (295)	89% (277)	86%	84%	87%	94% (469)	92% (502)
iiNet										
National	n/a	n/a	89%	100%	n/a	n/a	n/a	87%	95%	n/a
Urban	n/a	n/a	85%	n/a	n/a	n/a	n/a	88%	93%	n/a
Rural	n/a	n/a	100%	100%	n/a	n/a	n/a	83%	100%	n/a
Remote	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Primus										
National	n/p	100%	100%	100%	100%	n/p	100%	100%	93%	84%
Urban	n/p	100%	100%	100%	100%	n/p	100%	100%	93%	90%
Rural	n/p	100%	100%	100%	100%	n/p	100%	n/a	92%	72%
Remote	n/p	100%	100%	100%	n/a	n/p	n/a	100%	n/a	n/a

n/a=not applicable. n/p=not provided.
*iiNet acquired AAPT's Consumer Division on 1 October 2010, and so iiNet data is for only three-quarters of 2010–11.
†iiNet has informed the ACMA that it is no longer providing new priority assistance connections.
Note: 'Urban' is defined as communities with 10,000 or more people, 'rural' is defined as communities with between 200 and 10,000 people, 'remote' is defined as communities with up to 200 people.
Source: CSP data.

Telstra's local presence plan

As part of its licence conditions—Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997—Telstra is required to maintain a local presence in regional, rural and remote Australia, to the extent that this is broadly compatible with its overall commercial interest. The local presence plan must set out the range of activities and strategies that Telstra will deploy to fulfil its obligation.

On 26 June 2012, the ACMA received notification from the minister that Telstra's 2012–15 local presence plan (also known as Telstra's Regional and Rural Presence Plan 2012–15) had been approved. The 2012–15 local presence plan replaces the 2009–12 plan and is effective until June 2015. Under its licence conditions, Telstra must report annually on the progress of its local presence plan. Telstra has submitted a report to the ACMA setting out how it met the requirements of this carrier licence condition in 2012–13.

National Relay Service

The NRS is an Australian Government initiative that gives people who are deaf or have a hearing and/or speech impairment access to a standard telephone service on comparable terms and circumstances to the access other citizens have to a standard telephone service. From 1 July 2012, the ACMA handed over responsibility for management of the NRS contracts to TUSMA. Information about the NRS can be found in TUSMA's annual report at www.tusma.gov.au.

The total number of minutes relayed by the NRS during 2012–13 was 3.06 million, an increase of three per cent in comparison to 2011–12. Internet relay call minutes accounted for 58 per cent of total call minutes relayed during 2012–13, compared to 52 per cent during 2011–12.[2]

Disability equipment program

The Telecommunications (Equipment for the Disabled) Regulations 1998 specifies the kinds of equipment that people with a disability can use to access telecommunications services. The provision of the equipment listed in the regulations is an obligation on Telstra, as the PUSP.

Telstra outlines the services it will provide to eligible customers with a disability under its USO Standard Marketing Plan and it supplies equipment through its disability equipment program. Optus also has a disability equipment program for customers who directly access the Optus telephone network.

During 2012–13, Telstra fulfilled 6,891 requests under the disability equipment program compared to 8,038 during 2011–12 and 9,652 in 2010–11.

Number portability

Number portability allows a customer to keep an existing telephone number when changing service provider. It is available for:

> local numbers (numbers beginning with the area codes 02, 03, 07 and 08)
> freephone (numbers beginning with 1800) and local rate numbers (numbers beginning with 13 and 1300)
> mobile numbers.

Local number portability

During 2012–13, 763,422 local numbers were ported. This represents a 22 per cent increase from the 627,160 numbers ported in 2011–12, but remains within the range of local numbers ported during previous periods (Table 3.14).

The C540:2007 Local Number Portability Code (LNP Code) sets out carrier/CSP operational procedures for porting local numbers and includes performance standards. The LNP Code has been revised and released for public comment by the Communications Alliance Ltd (CA) in June 2013. The revised code seeks to clarify and streamline current LNP processes and ensure that industry arrangements continue to meet customers' porting needs. CA is expected to present a revised LNP Code to the ACMA for registration in the next reporting period. CA is also undertaking a separate review of LNP arrangements to consider LNP in an NBN environment. The CA Board will consider the recommendations from this review in the next reporting period.

Freephone and local rate number (FLRN) portability

Industry Number Management Services Ltd (INMS) is an industry-owned not-for-profit company that allocates 13/1300/1800 numbers (FLRNs) on behalf of the ACMA (excluding smartnumbers auctioned by the ACMA). The INMS also facilitates the portability of all FLRNS on behalf of industry. There were 13,096 FLRNs ported during 2012–13, a two per cent increase on the 12,814 FLRNs ported during 2011–12 (Table 3.14).

Mobile number portability

Mobile number portability enables a mobile telephone user to retain a mobile number when changing from one mobile provider to another. Most mobile ports are completed within a few hours. During 2012–13, there were 1.74 million ports, a decrease of 34 per cent on the 2.63 million ports completed in 2011–12, but similar to the number of ports completed in previous periods (Table 3.14). The decrease in the number of ports in 2012–13 may be attributed in part to the significant number of ports completed by '3' during 2011–12 following the finalisation of its merger with Vodafone. Mobile number portability is provided in accordance with the provisions of the C570:2009 Mobile Number Portability Code (MNP Code) developed by the CA.

Table 3.14 Number portability

Numbers ported	2008–09	2009–10	2010–11	2011–12	2012–13
Local	832,218	615,860	702,369	627,160	763,422
Freephone and local rate	10,792	11,529	18,830	12,814	13,096
Mobile	1,346,689	1,660,873	1,896,016	2,627,350	1,743,485

Source: The ACMA and INMS.

Consumer awareness and attitudes towards local number portability

In 2012–13, the ACMA-commissioned research to get a better understanding of consumer awareness and attitudes towards local number portability and previous experiences with porting a fixed-line telephone number to another communications service provider.

Consumer awareness of local number portability is relatively high with 79 per cent of Australians aged 18 years and over aware of local number portability. However, only one in four Australians had ported their fixed-line telephone number to another provider in the past 10 years.

While the number of fixed-line services is declining, three-quarters of Australians consider it is important to be able to keep their telephone number when changing providers, with 53 per cent citing it as very important (Figure 3.5).

Figure 3.5 Importance of keeping fixed-line number
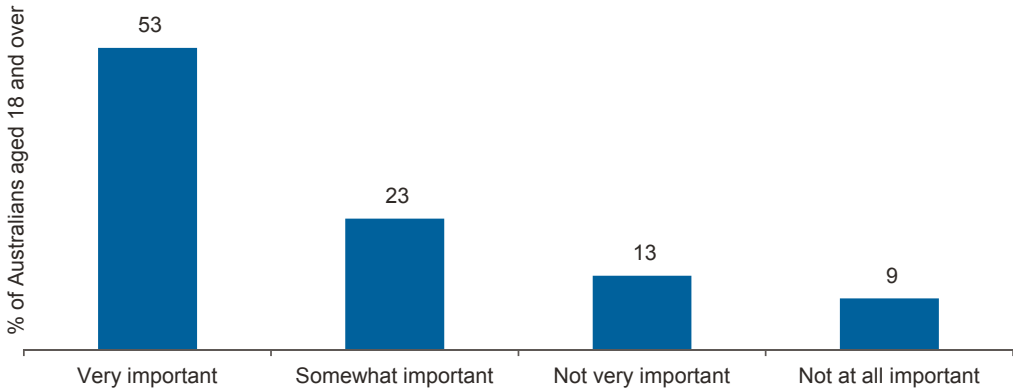
Source: ACMA-commissioned research, May 2013.

Pre-selection and call override

Pre-selection and call override are features provided on a standard telephone service that allow a consumer to nominate a preferred provider to supply specific call types, either on an ongoing basis or for an individual call. Pre-selectable services include:

> national long-distance calls

> international direct-dial calls (0011)

> certain operator-assisted calls

> international ring-back pricing code (0012) calls

> fixed-to-mobile calls.

There were a total of 13 active pre-selection agreements between carriers during 2012–13, and a total of 16 active override dial codes allocated to carriers during the same period. There were no complaints concerning pre-selection.

Cabling regulation

Registered cablers

All individual cablers who perform customer cabling work connected to the telecommunications network or intended for use on the customer side of the network boundary must either be registered with an ACMA-accredited registrar as a cabling provider or supervised by a person who is registered.

Table 3.15 shows that the total number of registered cablers in the industry has increased marginally each year since 30 June 2008.

Table 3.15 Total number of licensed/registered cablers

	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13
Number of cablers	59,743	61,904	64,587	65,696	67,637	69,155

Source: The ACMA.

In 2012–13, there were five ACMA-accredited registrars providing registration and other associated services to cablers. Registrars offered three types of cabler registration in accordance with the Telecommunications Cabling Provider Rules 2000 (the Cabling Provider Rules):

> open—covering all types of residential and commercial cabling work
> restricted—covering a restricted range of cabling work typically conducted in residential and small business settings
> lift—covering telecommunications cabling for lift installations.

Before being granted registration, cablers must meet the ACMA's competency requirements that address health, safety and network integrity issues.

Enforcing cabling compliance

The ACMA investigates complaints about non-compliant cabling work or work performed by unregistered cablers. Where appropriate, the ACMA conducts investigations arising from these complaints.

During 2012–13, the ACMA received 31 cabling-related complaints predominantly related to contraventions of the Cabling Provider Rules or alleged unregistered cablers. During the period, the ACMA also conducted 11 cabling inspections.

The ACMA issued two warning notices under the Act for labelling of non-compliant cable. There were no telecommunications infringement notices issued.

Do Not Call Register

The DNCR is a secure database that allows people to list their numbers to avoid receiving unsolicited telemarketing calls and marketing faxes. A number is eligible to be registered if it is:

> used or maintained primarily for private or domestic purposes
> used for transmitting and/or receiving faxes
> used exclusively by a government body
> an emergency service number.

In April 2013, the minister extended the period for which numbers are registered from six to eight years.

More than one million numbers were added to the DNCR in 2012–13, taking the total number of numbers listed to 8.74 million.

To avoid breaching the DNCR Act, telemarketers and fax marketers are able to submit their contact lists to the DNCR operator for checking, or 'washing', against the DNCR. During 2012–13, 1,251 telemarketers and fax marketers submitted databases with a total of over 1.25 billion numbers for checking (Table 3.16).

Table 3.16 Numbers submitted for checking against the DNCR, by financial year

	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13
Numbers submitted for checking	1.05 b	0.98 b	1.08 b	1.12 b	1.19 b	1.25 b

b=billion.
Source: Register operator (Service Stream Solutions Pty Ltd) reports to the ACMA.

Telemarketers and fax marketers may select one of four methods, or 'channels', to wash their contact lists. Figure 3.6 shows the volume of numbers submitted during 2012–13 using the primary washing channels.

Figure 3.6 Numbers submitted for checking against the DNCR, by channel

14 million

230 million

1,007 million

- Real time access—for small quantities of numbers (1%)
- Manual file upload—for large quantities of numbers (81%)
- Automated washing service—for large quantities of numbers (18%)
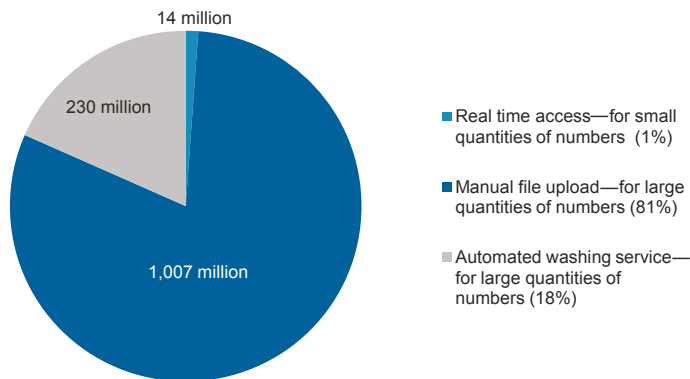
Note: Overall there are four channels available, however only the primary channels are included: real time access, manual file upload and automated washing service.
Source: ACMA-commissioned research.

Compliance and enforcement

The ACMA administers a suite of legislation designed to minimise the impact on Australians of unsolicited telemarketing, fax marketing and commercial electronic messages (including emails, SMS, MMS and instant messaging).

Complaints

In 2012–13, the ACMA received a total of 19,677 complaints from Australians under Part 26 of the Telecommunications Act (see Figure 3.7).This was a decrease on the previous year, due in part to a decline in the number of complaints about the 'Microsoft Imposters' scam following joint action by the ACMA, the US Federal Trade Commission and the Canadian Radio-television and Telecommunications Commission in October 2012.

Figure 3.7 Complaints received
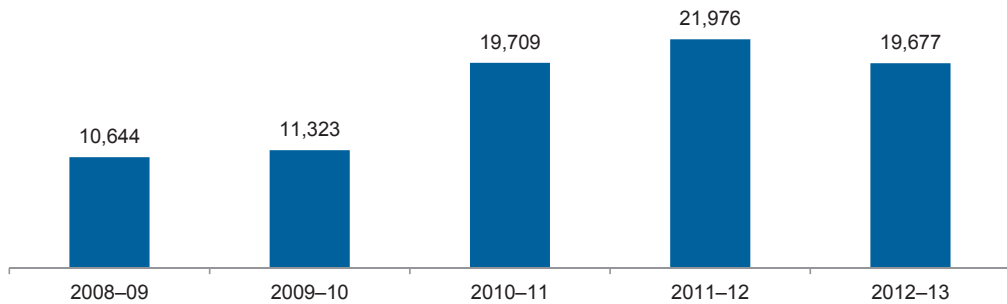
Source: Complaints to the Do Not Call Register.

Complaint classifications

Figure 3.8 shows the classification of the complaints the ACMA received during 2012–13 in terms of potential breaches of the DNCR Act, Telemarketing and Research Standard and Fax Marketing Standard.

Figure 3.8 Classification of the complaints received by the ACMA 2012–13
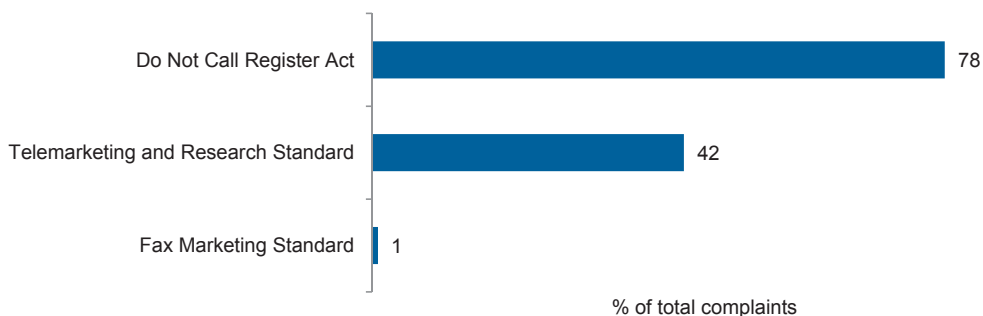
Note: Complaints may potentially breach both the DNCR Act and one of the standards so figures will not add up to 100 per cent.
Source: Complaints to the Do Not Call Register.

Telemarketing and fax marketing

Telemarketing complaints in 2012–13 continue to indicate the preference of Australian businesses to conduct most of their telemarketing during the cooler months (July–October and April–June) when more consumers tend to be home, and reduced activity as the weather gets warmer (November–March).

In 2012–13, the solar product and home maintenance industries were, respectively, the first and third industries generating consumer complaints about telemarketing (Table 3.17). The high level of telemarketing complaints in both of these industries has, in part, been due to the activities of 'lead generators'. Lead generators independently make telemarketing calls to generate interest in various products or services and identify potential purchasers. Calling lists developed through these calls are then sold on to relevant businesses.

Table 3.17 Top 10 industries the subject of telemarketing complaints in 2012–13

	Industry
1	Solar
2	Telecommunications
3	Home maintenance
4	Finance
5	Energy
6	Travel/Tourism
7	Marketing
8	Personal services
9	Pharmaceuticals
10	Real estate

Source: The ACMA.

Businesses operating in the telecommunications industry generated the second highest level of consumer complaints in 2012–13. The majority of complaints received were about smaller CSPs (complaints about larger carriers have fallen following successful compliance action in previous years).

Businesses in the finance, energy, marketing and real estate and marketing industries were also in the top 10, generating numerous complaints from consumers. The ACMA conducted six investigations into businesses operating in these sectors.

Advisory and warning letters (informal phase)

Advisory and warning letters are an informal approach to compliance problems and, in most cases, lead to recipients rectifying their poor compliance without further intervention by the ACMA.

During 2012–13, the ACMA sent 918 advisory letters to people and businesses identified as potentially in breach of the requirements of the DNCR Act and industry standards.

Investigation and enforcement (formal phase)

During 2012–13, the ACMA finalised 11 telemarketing-related investigations under Part 26 of the Telecommunications Act.

As a result of these investigations, the ACMA accepted two enforceable undertakings, issued three infringement notices and issued three informal warnings.

Spam and e-marketing

Spam

The *Spam Act 2003* sets out rules and requirements for the sending of all commercial electronic messages—emails, SMS and MMS, and instant messaging.

Australians may lodge complaints about spam under Part 26 of the Telecommunications Act and report spam or make enquiries via the ACMA website, email, telephone or SMS.

In 2012–13, the ACMA received a total of 412,743 complaints, reports and enquiries directly from members of the public about spam compared to 226,816 during 2011–12. The majority of these (396,908) were about email spam.

The ACMA aims to action 90 per cent of the complaints it receives about spam within eight days of receipt. In 2012–13, 99 per cent of complaints were actioned.

E-marketing

The breadth of industries using e-marketing in 2012–13 has been evident in the complaints the ACMA has received from consumers, with more than 40 industries being identified. Table 3.18 lists the top 10 industries that have been the subject of e-marketing complaints in 2012–13.

Table 3.18 Top 10 industries the subject of spam contacts in 2012–13

	Industry
1	E-business and online stores
2	Retail
3	Finance
4	Real estate
5	Entertainment
6	Telecommunications
7	IT & C Marketing/Development
8	Advertising/Marketing
9	Automotive
10	Sports/Fitness

Source: The ACMA.

E-business and online stores have attracted the most complaints in the financial year, growing 17 per cent on the previous year, most likely reflecting a shift from traditional retail environments. In 2012–13, many large mainstream retailers participated in online marketing events such as 'Click Frenzy' to promote and sell online, with e-marketing operating as an important promotional tool. However, the ACMA has observed that not all customers respond positively and that they are suffering from 'e-marketing fatigue' as a result of the frequent messages some members of this industry send. The main compliance issues identified in the complaints were problems with consent and failure to action requests to unsubscribe, which resulted in the ACMA conducting two investigations into e-businesses and online stores in 2012–13.

The ACMA's e-marketing blog program *Successful e-marketing ... it's about reputation* in 2012–13 encourages best practice compliance for all industry, but it has a special focus on the e-business and online stores sector. A blog released in November 2012, for example, encouraged best practice consent in the lead up to the 'Click Frenzy' event.[3] Around 600 e-marketers across all industries are directed to the ACMA's e-marketing blog each month making this an effective mechanism to educate and address compliance.

Other industry sectors that featured prominently in complaints were the finance and advertising/marketing industries. Two investigations were conducted in 2012–13 that related to these sectors.

Cybersecurity

During 2012–13, the Internet Industry Association of Australia (IIA) continued its review of the icode, a voluntary ISP code of practice aimed at promoting a security culture within the Australian internet industry. The icode, which commenced operating on 1 December 2010, is designed to provide a consistent approach for Australian ISPs to help inform, educate and protect their customers against cybersecurity risks. At 30 June 2013, 34 Australian internet providers had confirmed to the IIA that they were 'icode compliant'.

A key objective of the icode is to reduce the number of compromised computers in Australia. Compromised computers often form into 'botnets'—networks of computing devices that have become compromised through the surreptitious installation of malicious software (malware). This malware enables these devices to be controlled remotely for illegal and harmful activities, including disseminating spam, hosting of 'phishing' sites and distributing denial of service attacks on internet infrastructure.

The icode is supported by the ACMA's Australian Internet Security Initiative (AISI) program, which provides daily reports to AISI participants—Australian ISPs and universities—about 'infected' computing devices residing on their networks. When they receive a report of an infection, AISI participants are expected to contact their customers, inform them that their computing devices are infected and provide information to help restore these devices to safe operation.

At 30 June 2013, there were 133 participants in the AISI, with these participants covering around 98 per cent of allocated Australian IP address ranges. The average number of reports provided to ISPs per day in 2012–13 was 16,034, compared to 16,517 in 2011–12.

A separate cybersecurity activity of the ACMA in 2012–13 was the expansion of its automated system for reporting suspected 'phishing' URLs extracted from spam emails reported to the ACMA. Phishing emails direct internet users to fraudulent websites that represent themselves as belonging to legitimate businesses, such as banks. Their main function is to obtain financial and personal information from unsuspecting internet users for criminal purposes.

Recipients of the ACMA's phishing reports include the Australian Tax Office, Facebook, Telstra and a number of major financial institutions. Approximately 33,600 reports of suspected phishing URLs were provided to these organisations in 2012–13. To assist the early shutdown of these malicious websites, the reports are provided a few minutes after the spam is reported to the ACMA.

Telecommunications codes—development and review

Under Part 6 of the Act, the ACMA may register codes developed by industry bodies. At 30 June 2013, 22 codes were registered, comprising:

> 19 codes developed by CA
> the Cabling Requirements for Business Code, developed by the Cabling Industry Committee
> the Australian eMarketing Code of Practice, developed by the Australian Direct Marketing Association
> the Internet Industry Spam Code of Practice, developed by the Internet Industry Association with the Western Australian and South Australian internet associations.

CA revised the following industry codes in 2012–13:

> C628:2012 Telecommunications Consumer Protections Code—registered
  1 September 2012
> C564:2011 Mobile Base Station Deployment Code—registered 1 July 2012.

Industry compliance with telecommunications codes

The ACMA has the power to conduct investigations into certain matters under Part 26 of the Act, including where the ACMA believes that there has been a contravention of a code registered under Part 6 of the Act. In 2012–13, the ACMA conducted 280 preliminary enquiries and commenced nine investigations into compliance with the Telecommunications Consumer Protections Code (TCP Code).

AAPT investigation

Following media reports in July 2012 of a security incident involving AAPT customer information being stolen, the ACMA commenced an investigation. It found that AAPT failed to protect the privacy of its customers' personal information as required by the TCP Code 2007.

In particular, AAPT did not protect the personal information of some of its small business customers whose billing and related personal information it had collected. The personal information was stored in a server offsite managed by a third party, and was the subject of a hacking incident.

AAPT received a formal warning under section 122(2) of the Act for contravening clause 6.8.1 of the TCP Code 2007, which was in place at the time of the incident.[4]

Telstra—international roaming investigation

Telstra contacted the ACMA on 22 November 2012 to advise that it identified in April 2012 that it had overcharged 260,165 consumers a total of $30 million for international data roaming sessions. The overcharging began in October 2006 and the median amount overcharged was $4.50. Telstra became aware of the issue during an investigation into an international roaming customer billing complaint. Upon discovering that the customer in question had been charged multiple session flag fall fees for a single session, Telstra initiated a wider investigation and audit.

The ACMA commenced an investigation into Telstra's compliance with the TCP Code on 30 November 2012. It found that from February 2009, Telstra contravened clause 6.4.1 of the TCP Code 2007 because Telstra failed to take appropriate action to ensure that it verified and demonstrated billing accuracy after receiving complaints about inaccurate billing for international data roaming sessions.

Had the TCP Code 2012 been in force at the time, the same conduct would have contravened clause 5.5.1 given that this provision is almost identical to clause 6.4.1 of the TCP Code 2007 and the minor differences are not material to the factual circumstances of the present case.

The ACMA is satisfied that Telstra is now compliant with clauses 5.5.1 and 5.5.2 of the TCP Code 2012 in relation to billing for international data roaming sessions.

Startel investigation

On 12 June 2012, the ACMA commenced an investigation into Startel's compliance with the TCP Code 2007 and the C518:2006 Call Charging and Billing Accuracy Code (the CCBA Code). This investigation resulted from Startel's voluntary admission to the ACMA of a billing system error that was rectified within 24 hours of being identified.

It found that Startel had contravened clause 6.4.1 of the TCP Code 2007 for not ensuring that it could verify and demonstrate billing accuracy, and clause 4.2 of the CCBA Code by failing to have a test plan in place.

Startel has now entered into a deed with the ACMA, which requires the provider to reimburse all the customers affected by its billing error and to provide regular reports to the ACMA on the progress of the reimbursements.

Compliance with the TCP Code 2012

As noted above, the TCP Code 2012 was registered on 1 September 2012.

The TCP Code 2012 includes:

> enhanced rules for complaints-handling—particularly providers delivering on the undertakings they make to customers when resolving complaints
> enhanced rules for credit management—particularly those concerning financial hardship, which industry has delivered largely independent of the ACMA's *Reconnecting the Customer* public inquiry
> new information requirements for advertising—both the inclusion of standard charging information and potentially misleading and confusing claims
> a new requirement to provide a critical information summary
> a new requirement to provide comparative billing information
> new rules for spend management alerts
> the establishment of Communications Compliance (CommCom). CommCom is a self-regulatory industry body that aims to improve industry members' compliance with code rules.

The implementation of these new obligations is being phased to give telecommunications providers the opportunity to implement new systems and processes (Table 3.19).

Table 3.19 Phased implementation of the TCP Code 2012

Effective date	Obligations
1 September 2012	Complaints-handling, credit management and requirements for advertising
27 October 2012	Advertising of standard charging information
1 March 2013	Rules for critical information summaries, comparative billing information and communications compliance
1 September 2013	Rules for spend management alerts—large providers
1 September 2014	Rules for spend management alerts—small providers

Between 1 September 2012 and 30 June 2013, the ACMA found that industry's compliance with the new code rules was generally very good:

> 27 advertisements from 22 providers in the first 10 weeks of the code's implementation were assessed as compliant with requirements not to use confusing advertising terms such as 'capped', 'free' and 'unlimited' where the offers are not capped, free or unlimited, respectively
> the majority of 33 advertisements of eight larger providers complied with requirements for prominent standard charge information
> after a slow start, the majority of Critical Information Summaries (CIS) of 88 providers were assessed as compliant

> 22 financial hardship policies and 23 complaints-handling policies, covering an estimated 95 per cent of the Australian consumer market were assessed as compliant or quickly became complaint, with one exception

> companies with an estimated 99 per cent of market share (based on TIO complaints) lodged required compliance documentation with CommCom. However, 186 small providers who had at least one TIO complaint in the previous twelve months and had failed to lodge required documents received a preliminary breach finding. Submissions from these providers were due on 1 July 2013.

Instances where providers did not provide a satisfactory response and were issued with directions or formal warnings include:

> Touch Mobile and Jadi1 received directions to comply with the TCP Code 2012 for failing to make CIS documents available

> Sure Telecom, iTalkBB and Australian Private Networks (trading as Activ8me) received formal warnings for non-compliance with CIS requirements

> Vodafone received a formal warning for failing to prominently display its standard charges in a mobile phone offer

> Clear Networks received a formal warning for deficiencies in its financial hardship policy

> Southern Cross Telco received a formal warning after informing the ACMA of unauthorised disclosures of personal information.

Industry compliance with TIO scheme

Section 128 of the TCPSS Act requires carriers and eligible CSPs to join the TIO scheme. Eligible CSPs are those providers who supply fixed standard telephone, mobile or internet services to residential and small-business customers. TIO scheme members are required to comply with the scheme.

In 2012–13, the TIO referred 18 providers to the ACMA for failure to join the scheme and one provider for failure to comply with the scheme. The ACMA found four providers were not eligible to join the TIO scheme and three providers joined the scheme without further intervention from the ACMA. The ACMA opened investigations into the 12 remaining providers. Six of these have been resolved by the providers joining the TIO scheme. The other six remain the subject of ACMA investigations.

On 1 February 2013, the Federal Court awarded civil penalties against a Canberra-based ISP, Bytecard Pty Ltd and its director, Mr Brian Morris. The Court found that Bytecard and its director breached the TIO scheme, the Act and the TCPSS Act by failing to comply with five remedial directions issued by the ACMA. These related to Bytecard's non-compliance with five determinations made by the TIO. Justice Foster's decision sends a clear message to the industry about the importance of complying with the TIO scheme.

Complaints to the TIO

The TIO scheme provides for the resolution of unresolved complaints about carriers or CSPs made by residential and small-business customers where those complaints are not resolved by the CSP/carrier.

In 2012–13, the TIO had 1,360 members, up from 1,221 in 2011–12.

There were 158,652 new complaints made to the TIO during 2012–13, down substantially (18 per cent) from 2011–12. The most significant decrease in complaints was for mobile services, which may reflect the impact of the new TCP Code and its focus on improving customer outcomes, particularly for post-paid mobile services.

The TIO records a new complaint when it receives an expression of dissatisfaction from a consumer whose complaint has not been resolved by the service provider. The TIO allocates complaint issues within each new complaint from a choice of keywords that are aligned to industry codes or common complaint categories identified by the TIO. Each new complaint involves at least one complaint issue.

Figure 3.9 Annual TIO new complaints by service type
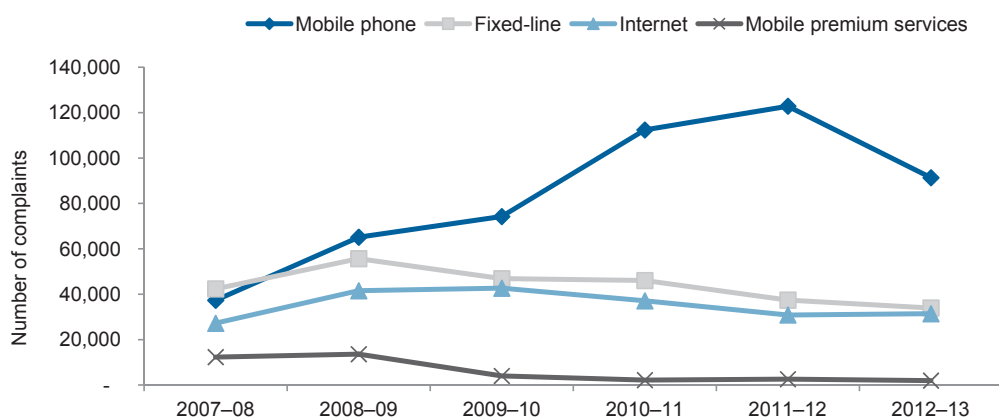
Source: TIO.

Table 3.20 shows the top five TIO new complaint issues for the last two financial years. The number of complaint issues in each category has fallen in 2012–13.

Table 3.20 Top five TIO new complaint issues

Complaint issue category	2011–12	2012–13	% change
Customer service	109,502	94,639	−14%
Billing and payments	93,941	78,160	−17%
Faults	78,829	75,325	−4%
Complaints-handling	65,818	50,504	−23%
Credit management	52,907	46,138	−13%

Source: TIO.

Consumer satisfaction with communications services

The majority of Australian communications consumers are generally satisfied with their communications services.[5]

Compared to results from 2012, the level of overall satisfaction (includes 'very satisfied' and 'satisfied' responses) with communications services has dropped by four percentage points for mobile telephones and seven percentage points for fixed-line phones. VoIP services saw the biggest change in satisfaction levels with a drop of nearly 10 percentage points. The results for internet cannot be compared due to a change in methodology.

In 2013, overall satisfaction levels were higher for fixed-line and internet users (71 per cent and 76 per cent respectively) than for mobile phones and VoIP users (69 per cent

and 55 per cent respectively). Levels of overall dissatisfaction with these four types of communications services ranged from eight (internet) to 13 per cent (VoIP).
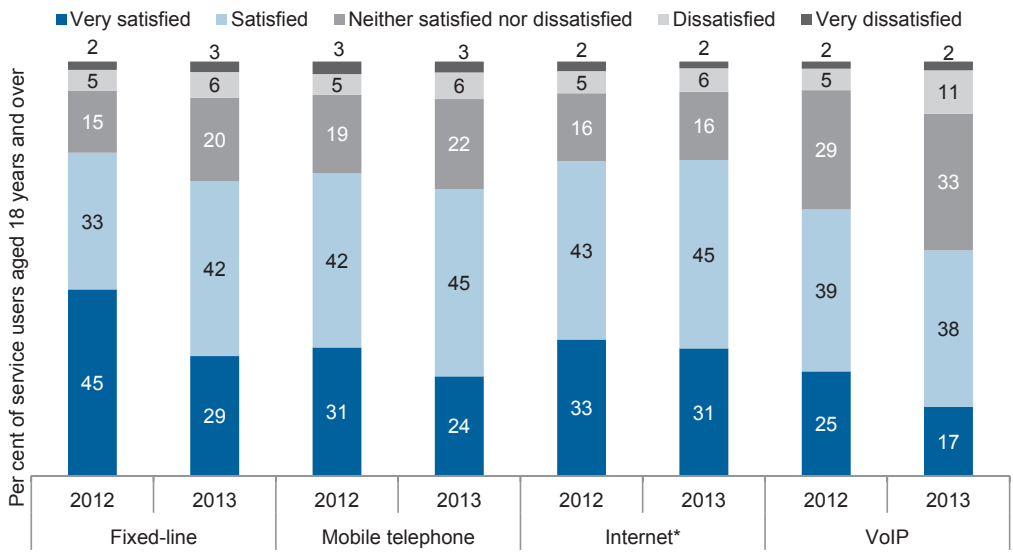
Note: Communications consumers are defined as having a fixed-line telephone and/or a mobile phone.
The response category 'Overall' is not an average of all other response categories. Respondents were asked a separate question about their overall level of satisfaction with each of the services identified.
*Due to changes to methodology, the overall internet satisfaction data is sourced from the Roy Morgan Single Source, Apr–Jun 2013.
Source: ACMA-commissioned survey May 2012 and May 2013.

Satisfaction with communications service components

Table 3.21 presents a summary of results from the 2013 satisfaction survey.

Customer service—the levels of satisfaction ranged between 57 per cent and 59 per cent across all services. Dissatisfaction levels were also similar ranging between 14 per cent and 16 per cent.

Service reliability—fixed-line services recorded the highest levels of satisfaction (81 per cent) and mobile phone services the lowest (64 per cent). Mobile phone services also recorded the highest level of dissatisfaction (13 per cent).

Call/service and line rental costs—the highest levels of satisfaction with call/service costs were recorded for mobile phone services (54 per cent) compared to 51 per cent for both fixed-line telephone and internet services. Both fixed-line telephone and internet services recorded the highest levels of dissatisfaction for service costs (19 per cent each). Line rental costs for fixed-line telephone services had the highest recorded level of dissatisfaction—32 per cent at May 2013—for all services and service components.

Billing information—levels of satisfaction with billing information provided to customers were similar for the three main communications services, with 71 per cent for internet, 70 per cent for fixed-line telephone and 67 per cent for mobile phones. Dissatisfaction levels were also similar—10 per cent for both fixed-line and mobile telephone services and nine per cent for internet.

Mobile phone internet access and internet data speeds—at May 2013, 56 per cent of consumers with internet access via their mobile phone were satisfied with their mobile internet access and 17 per cent were dissatisfied. In terms of internet data speeds in general, 56 per cent were satisfied and 18 per cent were dissatisfied.

Table 3.21 Consumer satisfaction with communications services, May 2013

		Fixed-line telephone	Mobile	Internet
Customer service	Very satisfied	23%	22%	25%
	Satisfied	34%	37%	34%
	Dissatisfied	9%	9%	10%
	Very dissatisfied	6%	5%	6%
Service reliability	Very satisfied	42%	26%	30%
	Satisfied	39%	38%	42%
	Dissatisfied	4%	9%	7%
	Very dissatisfied	2%	4%	3%
Call/service costs	Very satisfied	20%	22%	20%
	Satisfied	31%	32%	31%
	Dissatisfied	12%	12%	13%
	Very dissatisfied	7%	5%	6%
Billing information	Very satisfied	32%	30%	35%
	Satisfied	38%	37%	36%
	Dissatisfied	7%	7%	6%
	Very dissatisfied	3%	3%	3%
Line rental cost	Very satisfied	14%	n/a	n/a
	Satisfied	23%		
	Dissatisfied	21%		
	Very dissatisfied	11%		
Internet access	Very satisfied	n/a	20%	n/a
	Satisfied		36%	
	Dissatisfied		12%	
	Very dissatisfied		5%	
Data speeds	Very satisfied	n/a	n/a	21%
	Satisfied			35%
	Dissatisfied			12%
	Very dissatisfied			6%
Technical support	Very satisfied	n/a	n/a	28%
	Satisfied			34%
	Dissatisfied			8%
	Very dissatisfied			5%
Speed of repairing faults	Very satisfied	n/a	n/a	21%
	Satisfied			33%
	Dissatisfied			10%
	Very dissatisfied			7%

n/a: not available. Respondents reporting 'neither satisfied nor dissatisfied' have not been identified separately in the table. However, these responses have been included in the base numbers when calculating percentages for satisfaction and dissatisfaction.
Source: ACMA-commissioned survey, May 2013.

Levels of satisfaction for these aspects of a fixed-line telephone and mobile telephone were similar to levels recorded in 2012, with only a slight drop in satisfaction for fixed-line customer service (six percentage points) and a slight increase in fixed-line billing satisfaction (five percentage points). Satisfaction levels for internet cannot be compared to 2012 due to a change in methodology.

The overall satisfaction with services was higher than for individual service components, a likely reflection of the overall importance people place on having a particular communications service. For example, 76 per cent of Australians aged 18 years and over were satisfied with their internet service, in comparison to lower levels of satisfaction with customer services, service reliability and billing information (59, 72 and 71 per cent, respectively).

Communications infrastructure regulation

When installing large telecommunications facilities such as mobile phone towers, carriers generally need to obtain local council planning permission and comply with relevant state and territory planning laws. Schedule 3 of the Act allows licensed carriers to install a limited range of facilities referred to as 'low-impact facilities' without seeking state or territory approval. Low-impact facilities as defined in the Ministerial Telecommunications (Low-impact Facilities) Determination 1997 are designed to be unobtrusive.

While low-impact facilities are exempt from local government planning laws, carriers must still comply with Schedule 3 of the Act and the Telecommunications Code of Practice 1997, which includes notifying land owners and occupiers of their activities, ensuring minimal detriment and damage is caused by the activity and restoring the land to a similar condition before the activity began. The ACMA may investigate systematic breaches of the Act and relevant codes.

Complaints and enquiries to the TIO

The TIO can consider objections to land access, and the installation and maintenance of low-impact facilities. The majority of complaints to the TIO relate to damage to property by carriers and the user charges billed as a result of damage reported to cables. During the reporting period, the TIO received a total of 327 complaints (not including enquiries)—a 20 per cent decrease from the 2011–12 reporting period. Of complaints received by the TIO during 2012–13:

> 153 were from owners/occupiers of land about alleged damage to property by the provider
> 99 were from owners/occupiers of land about carriers billing them for repairing damage to infrastructure allegedly caused by the owner/occupier
> 20 related to the standard of service from providers when installing subscriber connections
> 31 related to the failure of a carrier to give notice to the landowner or occupier
> 24 were objections by the landowner or occupier to the activity.

The TIO found no valid grounds for objection pursuant to section 4.31 of the Telecommunications Code of Practice 1997.

Figure 3.11 Facility installation complaints received by the ACMA and the TIO
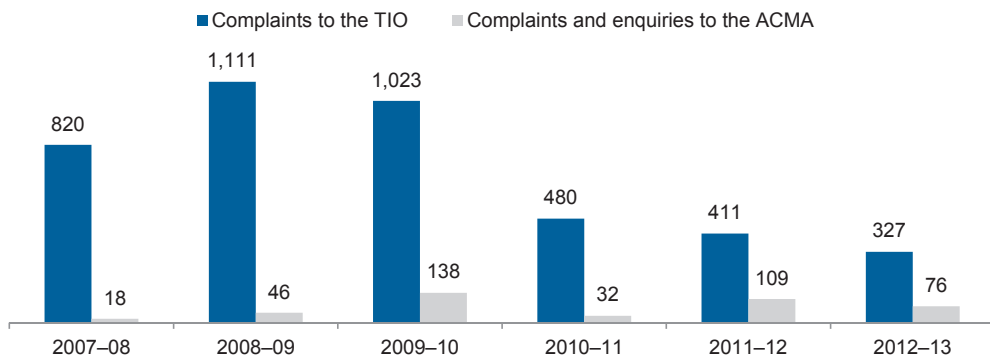
Source: The ACMA and the TIO.

Mobile phone base stations

Optus, Telstra and VHA are the three carriers that operate mobile phone networks in Australia. When installing mobile phone base stations, these carriers are required to comply with the C564:2011 Mobile Phone Base Station Deployment Code (the industry code). The industry code supplements the requirements already imposed on carriers under the existing legislative scheme by requiring them to consult with local communities and to adopt a precautionary approach in planning, installing and operating mobile phone base stations.

The communications industry has developed a national database of mobile phone base stations—the national site archive—to improve access to information about the deployment of mobile phone infrastructure across Australia. The archive contains information about most mobile phone towers deployed by carriers and includes Electromagnetic Energy reports about a particular communications facility. This information is available at www.rfnsa.com.au/nsa/index.cgi.

Complaints and enquiries to the ACMA

Complaints about carriers' compliance with the industry code are directed to the carriers in the first instance. The industry code specifies mandatory processes for complaints-handling by carriers. The ACMA examines complaints against the code and may take regulatory action under Part 6 of the Act.

During the reporting period, the ACMA received 75 enquiries and one complaint about matters covered by Schedule 3 of the Act and the Telecommunications Code of Practice 1997. The ACMA also received three complaints and 25 enquiries related to the industry code. The carriers undertook a total of 4,109 consultations during this period.

Endnotes

[1] A CSP is a QCSP if on the last day of the financial year preceding the CSG benchmark period, the CSP supplied 100,000 or more CSG services nationally. The QCSP is also required to report on areas where it satisfies the following national location specific thresholds: urban (10,000 CSG services), major rural (1,000 CSG services), minor rural (1,000 CSG services) and remote (500 CSG services).

[2] TUSMA, www.tusma.gov.au/.

[3] ACMA, 'Generate a Click Frenzy on your website', November 2012, www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Marketers/Emarketing/Generate-a-Click-Frenzy-on-your-website.

[4] www.acma.gov.au/theACMA/Newsroom/Newsroom/Media-releases/acma-issues-formal-warning-to-aapt

[5] ACMA-commissioned survey, May 2013.

Chapter 4
Broadcasting industry regulatory performance

Overview

Broadcasting legislation, program standards and licence conditions determine the regulatory obligations of commercial radio and television broadcasters in Australia. Chapter 4 provides information on the performance of broadcasters in meeting their regulatory obligations. Information is also presented on the number of broadcasting-related complaints to the ACMA under broadcasting codes of practice and about prohibited and potentially prohibited online content under the *Broadcasting Services Act 1992* (BSA).

Key developments relating to broadcasting compliance included:

> free-to-air commercial television licensees continuing to meet regulatory requirements for transmitting Australian content and advertising

> commercial and national television broadcasters complying with their quota requirements for HDTV transmission

> all regional commercial radio and television broadcasting licensees broadcasting the required amount of material of local significance

> digitalisation of Australian broadcasting services continuing with digital television rolled out across most of Australia, analog television services switched off in most areas and the number of people listening to digital radio increasing

> complaints for broadcasting matters (written only) and online content decreasing.

Australian content on television

The Broadcasting Services (Australian Content) Standard 2005 (Australian Content Standard) requires commercial television broadcasters to:

> broadcast a minimum level of Australian programming

> broadcast minimum amounts of first-release Australian drama and documentary programs

> broadcast minimum amounts of Australian-made children's programs

> ensure that all preschool programs are Australian.

From 1 January 2013, following the introduction of the *Broadcasting Legislation Amendment (Convergence Review and Other Measures) Act 2013*, commercial television broadcasters are required to meet specific Australian content quotas across non-core television services (multi-channels). For 2013, this requirement is 730 hours, increasing to 1,460 hours in 2015 and beyond. As with the Australian Content Standard, compliance is based on a calendar year, with 2013 results to be available for the 2013–14 communications report.

For the 2012 calendar year, the major metropolitan free-to-air commercial network licensees met the Australian content transmission quotas for overall content, drama and documentaries (Table 4.1).

Table 4.1 Major metropolitan free-to-air commercial network licensees meeting requirements of the Australian Content Standard for the 2012 calendar year

	Minimum transmission quota required to meet the standard	Licensees		
		Seven Network average across 5 mainland state capital cities	Nine Network average across Brisbane, Melbourne and Sydney	Ten Network average across 5 mainland state capital cities
Overall Australian content first-release and repeat programs* (%)	55	68	68	60
Australian drama first-release programs (points)	250	266	254	260
Australian documentaries first-release programs (average hrs)	20	54	22	21

*Must be broadcast between 6.00 am and midnight.

Children's programs on commercial television

In conjunction with the Australian Content Standard, the Children's Television Standards 2009 (CTS) are designed to give children under 14 years of age access to quality television programs that are specifically made for them and reflect their cultural experience.

The CTS requires licensees to provide at least 390 hours annually of children's programs comprising:

> 260 hours of children's (C) programs

> 130 hours of preschool (P) programs.

The Australian Content Standard sets out additional annual first release and C drama requirements within these quotas. For the 2012 calendar year, all metropolitan free-to-air commercial television broadcasting licensees met all of these annual quotas (Table 4.2).

Table 4.2 Children's and preschool children's programs, 2012 calendar year

Quota	Australian children's C drama		Australian children's C programs	Children's C programs	Australian preschool P programs
Run	**First release**	**Repeat**	**First release**	**All**	**All**
Measure	**Total annual hours**	**Total annual hours**	**Total annual hours—includes C drama**	**Total annual hours—all C programs**	**Total annual hours**
Minimum annual requirement	25	8	130	260	130
Seven licensees					
SAS Adelaide	32.5	102	130	260	130.5
BTQ Brisbane	32.5	102	130	260	130.5
HSV Melbourne	32.5	102	130	260	130.5
TVW Perth	32.5	102	130	260	130.5
ATN Sydney	32.5	102	130	260	130.5
Nine licensees					
QTQ Brisbane	32	88.5	130.5	262.5	130.5
GTV Melbourne	32	88.5	130.5	262.5	130.5
TCN Sydney	32	88.5	130.5	262.5	130.5
Ten licensees					
ADS Adelaide	25	68	131.5	264.5	130.5
TVQ Brisbane	25	68	131.5	264.5	130.5
ATV Melbourne	25	68	131	264.5	130.5
NEW Perth	25	68	131	264.5	130.5
TEN Sydney	25	68	131	264.5	130.5

Source: The ACMA.

Subscription television drama expenditure

The new eligible drama expenditure scheme requires licensees and channel providers that provide subscription television drama services to spend at least 10 per cent of their annual total program expenditure on eligible drama programs during a financial year. If the 10 per cent expenditure requirement is not met in the current financial year, the shortfall amount must be made up the following year.

To be eligible, a drama program must be an Australian or New Zealand production or co-production, and must not have been televised in Australia or New Zealand on a broadcasting service at any time before the expenditure on the program is incurred. While the scheme imposes a spending obligation on licensees and channel providers for Australian and New Zealand programs, there is no broadcasting requirement.

The BSA defines a subscription television drama service as a service devoted predominantly to drama programs; that is, more than 50 per cent of the programming consists of drama programs.

Each year, scheme participants are required to provide annual returns by 29 August. As a result, only 2011–12 information is available. For the 2011–12 compliance period, six licensees and seven channel providers supplied 28 eligible drama channels. All participants met their expenditure obligations for this period, reporting an expenditure on new eligible Australian drama of $24 million (aggregated). Of that expenditure, $6.8 million was nominated to acquit the expenditure shortfall for 2010–11. Similarly,

for 2012–13 licensees and channel providers must spend a minimum of $6.4 million on new eligible programs to acquit the remaining 2011–12 obligation.

Australian advertising

Advertisements are classified as Australian or foreign by Commercials Advice Pty Ltd, also known as CAD, which is wholly owned by Free TV Australia. CAD classification data, together with reports from the commercial television licensees, are used to monitor trends in Australian and foreign content in advertising. The ACMA publishes annual reports on compliance with the standard on its website.

Table 4.3 Top three product categories for Australian and foreign advertisements

Australia		Foreign	
2011	**2012**	**2011**	**2012**
Retail	Retail	Retail	Retail
Entertainment	Entertainment	Motor vehicle	Motor vehicle
Motor vehicle	Motor vehicle	Leisure and outdoor	Leisure and outdoor

Note: The top three Australian categories have been consistent since 2005.

The total number of advertisements classified as Australian decreased by two per cent to 73,942 in 2012, from 75,644 in 2011. Foreign advertisements also reduced by two per cent to 3,578, while exempt advertisements increased by 10 per cent to 5,615 (Figure 4.1).

Figure 4.1 Australian and foreign advertisements classified by CAD, by calendar year

	2007	2008	2009	2010	2011	2012
Australian	58,116	84,924	79,003	80,284	75,644	73,942
Foreign	3,016	3,052	2,679	3,065	3,635	3,578
Exempt	5,661	5,036	5,554	4,900	5,093	5,615
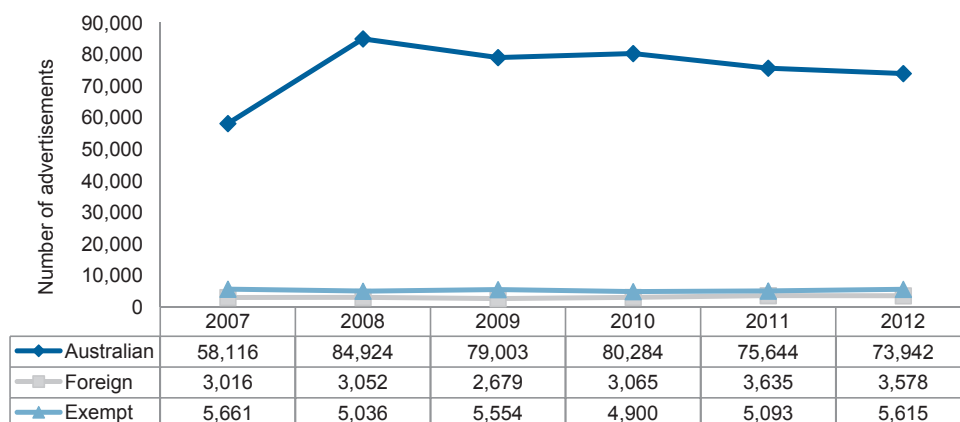
Source: CAD.

Figure 4.2 shows that all free-to-air television networks broadcast more than the required 80 per cent of Australian advertising in the 2012 calendar year, with the overall average of 89 per cent across networks.[1]

Figure 4.2 Percentage of Australian advertising broadcasted by calendar year

	2007	2008	2009	2010	2011	2012
Seven Network	86%	87%	87%	87%	86%	89%
Nine Network	93%	92%	91%	91%	90%	90%
Network Ten	86%	85%	87%	85%	85%	83%
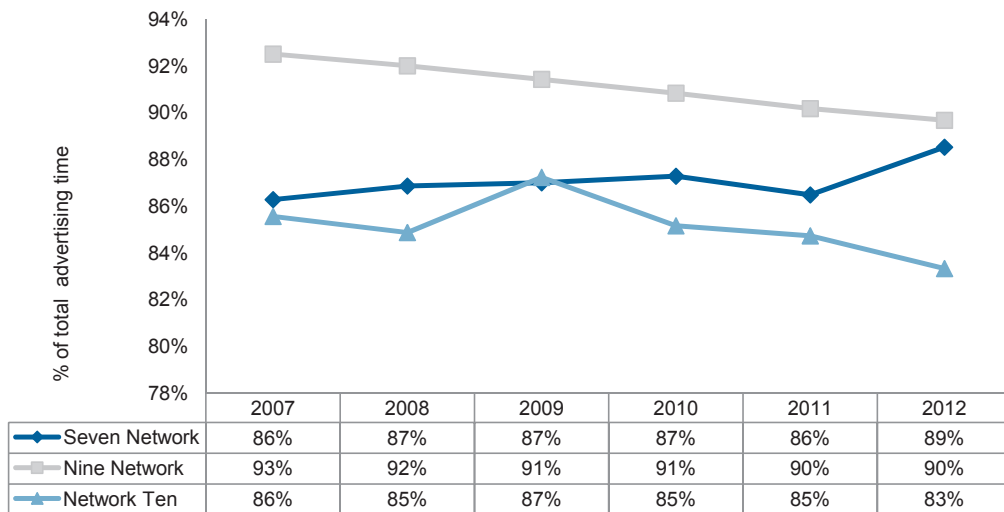
Source: CAD.

Captioning

Under the BSA, free-to-air television broadcasters (ABC, SBS and commercial stations) are required to provide a captioning service for all programs transmitted between 6.00 pm and 10.30 pm and during all news and current affairs programs.

On 28 June 2012, the government amended captioning provisions in the BSA. From 1 July 2012, free-to-air television broadcasters and subscription television licensees are required to meet annual captioning targets.[2]

One of the amendments requires the ACMA to develop captioning quality standard(s) for television programs transmitted on free-to-air broadcast television and subscription television. The ACMA's new television captioning quality standard[3] came into effect on 5 June 2013. The standard requires captions to be readable, accurate and comprehensible so that they are meaningful to deaf and hearing-impaired viewers.

Notification of changes in control

Commercial television and radio licensees and publishers of associated newspapers must notify the ACMA of any changes in control within five days of becoming aware of those changes (section 63 of the BSA). Persons who come into a position to exercise control of such licences and associated newspapers are also required to notify the ACMA within five days of becoming aware of the change in control (section 64 of the BSA).

The ACMA updates the Register of Controlled Media Groups (RCMG) when it is notified of relevant changes in control. An unacceptable media diversity situation arises if a change in control results in fewer than five points in any metropolitan commercial radio licence area or fewer than four points in any regional commercial radio licence area (subsections 61AB(1) and 61AB(2) of the BSA). In general, each registrable media group constitutes one point, as does each separate media operation that is not part of a registrable media group (section 61AEA of the BSA).

Compliance with legislative requirements

Under Part 14E of the BSA, an authorised ACMA infringement notice officer can issue a formal warning (under section 205XA) and this may be followed by an infringement notice (under section 205Y) where the officer has reasonable grounds to believe that a person has contravened a notification provision referred to above (section 62, 63 or 64).

Thirteen transactions affecting the control of media operations occurred during 2012–13.

For the fourth year running, the licensees of all 327 commercial broadcasting licences and publishers of all 46 associated newspapers lodged their annual returns on time (as required under Part 5 of the BSA). The information contained in the annual returns is used to monitor the ownership of media operations and is reflected in the media control database and the RCMG.

During 2012–13, one infringement notice and six formal warnings were given for late notifications. However, these were related to events that took place in previous financial years.

Local information on regional television

The following regional commercial television broadcasting licensees in Queensland, New South Wales, Victoria and Tasmania must broadcast minimum amounts of material of local significance (local content) as a result of an additional licence condition:

> Seven Qld, Southern Cross and WIN TV in regional Queensland
> NBN Ltd, Prime Television and Southern Cross in northern New South Wales
> Prime Television, Southern Cross and WIN TV in southern New South Wales
> Prime Television, Southern Cross and WIN TV in regional Victoria
> Southern Cross, WIN TV and Southern Cross/WIN joint venture in Tasmania.

For the period 22 July 2012 to 2 February 2013, all regional broadcasting licensees in Queensland, New South Wales, Victoria and Tasmania (except Tasmanian Digital Television) reported that they met the weekly and six-weekly minimum quota requirements of 90 points and 720 points respectively.

Tasmanian Digital Television reported that it met its 120-point quota requirement for the period 1 January to 31 December 2012. Being a digital-only commercial television service, Tasmanian Digital Television operated under an additional licence condition until 31 December 2012. For the period 1 January to 2 February 2013, Tasmanian Digital Television met the pro rata quota requirement of 480 points over four weeks.

In June 2013, the ACMA commenced an investigation into local content on regional commercial television, following a ministerial direction. The focus of the investigation is on the operation and effectiveness of the current legislative requirements, including the importance of local content to people living in regional areas, access to local content in regional areas, the economic circumstances of regional commercial television broadcasters and whether the current requirements should be extended to other regional areas. The investigation will include public consultation, a quantitative survey of people living in regional areas of Australia and economic analysis. It is expected to be completed in the next reporting period.

Local content, presence and information on regional radio

Since 1 January 2008, the Broadcasting Service (Additional Regional Commercial Radio Licence Condition – Material of Local Significance) Notice 19 December 2007 (the 2007 licence condition) requires regional commercial radio broadcasting licensees to broadcast prescribed amounts of material of local significance (local content) between 5.00 am and 8.00 pm on business days.[4]

According to licensees' annual returns for 2011–12, all 222 licensees met their local content quotas by broadcasting prescribed amounts of local content.

Since April 2007, regional commercial radio broadcasting licensees affected by certain changes in ownership or control (known as 'trigger events') have also attracted obligations to:

> maintain existing levels of local presence (local staff and facilities)

> broadcast specified amounts of local news, weather and other information (also known as the minimum service standards under Part 5 of the BSA).

According to licensees' annual returns for 2011–12, all trigger event affected licensees maintained existing levels of local presence and met their minimum service standard quotas.

In April 2012, the *Broadcasting Services Amendment (Regional Commercial Radio) Act 2012* amended the BSA so that remote area and racing service licensees were exempted from the obligations to broadcast prescribed amounts of material of local content, maintain existing levels of local presence and broadcast the minimum service standards.[5]

In May 2013, all regional commercial radio licensees (other than remote area, racing and section 40 licensees) were asked to complete Local Record Presence Forms providing a snapshot of local presence levels as at April 2013. All licensees met this requirement.

As at 30 June 2013, 95 regional commercial radio licensees had been affected by a trigger event since April 2007. During 2012–13, trigger events occurred for six licensees.

Datacasting

Datacasters are subject to licence conditions in the BSA that control and restrict the content they can transmit. During the reporting period, the ACMA received 16 complaints about datacasters and conducted three investigations into licensee compliance with the applicable licence conditions. The three investigations are the first the ACMA has conducted into datacasting.

Datacasters are permitted to transmit information-only programs, educational programs and foreign-language news and current affairs. Datacasters are prohibited from transmitting Category A or B programs which include drama, comedy, sport, English language news and current affairs. Datacasters are also subject to a licence condition that they will not transmit content that has been classified R18+ or X18+ by the Classification Board.

Of the three ACMA investigations, two related to the category of program. The first investigation found that Channel Seven Melbourne Pty Ltd (the licensee of datacasting service TV4ME) breached a licence condition by transmitting various entertainment programs in March 2012. The second investigation found that Channel Seven Perth

Pty Ltd (the licensee of datacasting service TV4ME) did not breach a licence condition by transmitting *Psychic TV* on 7 January 2013.

The third investigation concerned the classification of certain material. The ACMA found that Nine Network Queensland Television Ltd and Channel Nine Pty Ltd (licensees of the datacasting service Extra) did not breach the classification licence condition by transmitting *Babe TV* on 8 October 2012.

Anti-terrorism standards

The Broadcasting Services (Anti-terrorism Requirements for Open Narrowcasting Television Services) Standard 2011 and the Broadcasting Services (Anti-terrorism Requirements for Subscription Narrowcasting Television Services) Standard 2011 (collectively the 2011 Anti-terrorism Standards) commenced on 1 July 2011.

For the second consecutive year there were no complaints or investigations about industry compliance with the 2011 Anti-terrorism Standards.

Commercial radio standards

During the reporting period, the ACMA conducted eight investigations into alleged breaches of commercial radio standards.

Advertising

Four investigations concerned both the Broadcasting Services (Commercial Radio Advertising) Standard 2012 and clause 3.1(a) of the Commercial Radio Australia Codes of Practice and Guidelines 2011 (the Code). Clause 3.1(a) requires that advertisements must not be presented as news or other program material. All four investigations related to using the song *Down Down* by Status Quo in a radio advertising campaign. One investigation resulted in a breach finding against Southern State Broadcasters Pty Ltd (the licensee of commercial radio station 5DN) as the material, broadcast on 11 July 2012, was not distinguishable as an advertisement and was presented as a classic hits song rather than an advertisement. Three investigations resulted in no breach findings against ARN Communications Pty Ltd (the licensee of commercial radio stations 2UUS, 3KKZ and 4KQ) of both the licence condition and clause 3.1(a) of the Code in relation to their broadcasts on 11 July 2012.

Disclosure

One investigation under the Broadcasting Services (Commercial Radio Advertising Standard) 2012 found that Great Southern Land Broadcasters Pty Ltd (the licensee of commercial radio station Sea FM) did not breach the standard during the broadcast of *Sea FM Breakfast with Nick & Woody* program on 23 January 2013.

The ACMA conducted three investigations under both the Broadcasting Services (Commercial Radio Advertising) Standard 2012 and the Broadcasting Services (Commercial Radio Current Affairs Disclosure) Standard 2012. The programs investigated were, *The Alan Jones Breakfast Show* and *The Ray Hadley Morning Show* broadcast by Harbour Radio Pty Limited (the licensee of commercial radio station 2GB) on 6 December 2012 and 20 February 2013 respectively, and *The John MacKenzie Morning Show* broadcast by Prime Radio (Cairns-AM) Pty Limited (the licensee of commercial radio station 4EL) in relation to its broadcast on 19 February 2013. All three investigations resulted in no breach findings.

Digital broadcasting

Digitalisation of Australian broadcasting services includes the phased transition of terrestrial television services from analog to digital services in the period June 2010 to December 2013 and the introduction of digital radio services.

Digital television

Since the initial switching-off of analog services in the Mildura and Sunraysia licence area in Victoria on 30 June 2010, switchover has continued across most of Australia. During the 2012–13 reporting period, the following areas switched over from analog to digital television (Table 4.4).

Table 4.4 Switchover dates in 2012–13

Switchover area	Switchover date
Northern New South Wales	27 November 2012
Adelaide	2 April 2013
Tasmania	9 April 2013
Perth	16 April 2013
Brisbane (includes Sunshine Coast and Gold Coast)	28 May 2013
Remote and Regional Western Australia	25 June 2013

The Remote and Regional Western Australia licence area overlaps with four smaller remote licence areas—Geraldton, Kalgoorlie, South West and Great Southern, and Western Zone.
Source: The ACMA.

The remaining areas switch-over in the second half of 2013—Darwin switched-over on 30 July, with Sydney (including Gosford) planned for 3 December 2013, and Melbourne and Remote Central and Eastern Australia planned for 10 December 2013.

Aside from these major areas, a number of towns may switch-over on dates earlier than those mentioned above. Details of the affected towns and the exact dates are published on the Digital Switchover Taskforce website, www.digitalready.gov.au.

Under the National Television Conversion Scheme 1999 and the Commercial Television Conversion Scheme 1999, national and commercial broadcasters are required, during a simulcast period, to transmit television programs in analog and digital modes.[6] All national and commercial metropolitan digital services required under the conversion schemes have been rolled out, and rollout of converting digital services in regional and remote areas is progressing (Table 4.5). Completing the switchover will allow all free-to-air commercial and national broadcasters to cease analog television broadcasting by 10 December 2013.

Table 4.5 Percentage of required digital television services rolled out (1 July 2013)

	National (%)	Commercial (%)
Metropolitan	100	100
Regional	100	99
Remote	97	97

Note: Does not include retransmission services operated by local communities and other non-broadcasters.
Source: The ACMA.

Broadcasters continue to take advantage of the benefits offered by the transition to digital. Commercial broadcasters made use of additional capacity on their digital multiplexes to add datacasting services to their suites of channels.

Community television broadcasters in metropolitan areas (Sydney, Melbourne, and Brisbane) have completed the switchover and are all transmitting only digital-only services.[7]

Digital television consumer research

At June 2013, the percentage of Australian households that have converted to digital television increased to 98 per cent, up 16 percentage points since June 2012.[8]

High definition broadcasting

Under Part 4 of Schedule 4 to the BSA, commercial television broadcasting licensees and national broadcasters must meet HDTV quota standards until the end of the simulcast period (analog switch-off). Each commercial or national television broadcasting service in a mainland metropolitan area is required to transmit a quota of 1,040 hours of HDTV programming per calendar year. The HDTV obligations also apply to a number of broadcasters in regional areas.

The ABC and SBS are permitted to 'up-convert' their analog or standard definition television (SDTV) programs to HDTV.

Under the Broadcasting Services (Digital Television Standards) Regulations 2000, broadcasters required to meet the HDTV quota must report compliance information to the ACMA twice a year—interim reports for the first six months of the calendar year, followed by consolidated reports for the full 12 months. Records must be kept for 18 months after the transmission is first reported to the ACMA.

In the 2012 calendar year, commercial and national television broadcasters required to transmit the HDTV quota complied. The compliance results of national and commercial television broadcasters in the mainland metropolitan areas are presented in Table 4.6.

Table 4.6 High definition television quota compliance, 2012 calendar year

Broadcaster	HDTV hours (range)
ABC	8,458
SBS	8,748
Seven Network	1,272–1,430
Nine Network	3,504
Network Ten	3,875–3,919

Source: The ACMA.

Viewer Access Satellite Television service

The VAST service is a government initiative to give people in remote areas and terrestrial digital television 'black spots' access to a metropolitan equivalent suite of digital television services. The eligibility for access to commercial services on VAST is provided for in conditional access schemes developed by industry and registered by the ACMA under enabling legislation. Amendments to this legislation by the *Broadcasting Services Amendment (Digital Television) Act 2012* added new requirements to which the conditional access schemes must be directed.

This included a requirement for the schemes to allow for the scheme administrator to determine 'open access areas'—those areas where it is reasonable to expect that, at the end of the simulcast period, viewers will be unable to receive adequate reception of all applicable digital commercial terrestrial broadcasting services. In July 2012, the ACMA called on the industry to submit revised conditional access schemes that complied with the new legislated objectives. The ACMA registered the revised conditional access schemes in October 2012.

Complaints under the conditional access scheme for satellite access to digital television

Viewers who were refused access to VAST services by the scheme administrator can, under certain conditions, complain to the ACMA. The ACMA has the power to direct the scheme administrator to enable VAST access for viewers who cannot access terrestrial digital television services.

The ACMA received 299 complaints between 1 July 2012 and 30 June 2013. In 2012–13, the ACMA finalised the investigation of 257 complaints and issued 257 directions to the scheme administrator to grant VAST access to the complainants. Of the remaining 42 complaints, 28 were withdrawn as the affected viewers gained access to either VAST or terrestrial television services before the investigation was finalised. At the end of the reporting period, 14 complaints were still under investigation.

Digital radio

As at June 2013, there were over 1.6 million people listening to digital radio each week in Sydney, Melbourne, Brisbane, Perth and Adelaide. This compared with nearly 1.3 million at June 2012 and 940,000 at June 2010. The number of digital radios sold has also increased to 1.3 million at June 2013 from 908,311 at June 2012.[9]

Digital radio is currently not available permanently outside the five metropolitan areas. Testing of different technologies in regional areas is underway, as commercial radio operators work with the ACMA to develop regional trials. In response to applications from Commercial Radio Australia, the ACMA has authorised trials of DAB+ in two regional licence areas where sufficient spectrum is available—Canberra and Darwin. The Canberra trial commenced on 19 July 2010 and the Darwin trial on 13 August 2010. Both trials were initially licensed for 12 months but have been extended until 31 August 2014.

Broadcasting complaints

Broadcasting complaints and investigations

The BSA establishes a co-regulatory scheme that sets out roles for industry groups and national broadcasters across the commercial, community, narrowcast and subscription broadcasting sectors to develop codes of practice applicable to that section of the industry.

The ACMA registers broadcasting industry codes under section 123 of the BSA, but does not register codes for national broadcasters. Under the BSA, national broadcasters notify their codes to the ACMA.

Complaints about alleged breaches of the codes are handled in the first instance by the broadcaster. If not resolved, the complainant can then refer the complaint to the ACMA.

Complaints about alleged breaches of the BSA, licence conditions or program standards may be made directly to the ACMA.

Broadcasting complaints and investigations, 2008–13

The ACMA tracks the number and details of complaints it receives about possible breaches of the BSA, standards, licence conditions and code provisions. Not all complaints are investigated, either because the complainant chooses not to pursue the matter further or because the complaints are outside the ACMA's jurisdiction.

There were 2,178 written complaints and enquiries made to the ACMA about broadcasting matters during 2012–13. The number of investigations completed in 2012–13 was 212.[10] There were 10 investigations concluded without any finding where, for example, the complaint was withdrawn. The majority of investigations resulting in a breach finding or a non-breach finding occurred in the commercial television sector (Figure 4.3).

Table 4.7 ACMA broadcasting complaints and investigations by financial year

	2008–09	2009–10	2010–11	2011–12	2012–13
Written complaints and enquiries received	1,464	1,676	1,512	2,273	2,178[11]
Investigations completed	194	189	197	231	212
Investigations resulting in a breach finding*	80	74	72	71	67
Investigations resulting in a non-breach finding*	109	111	115	155	135

Investigations against a code of practice, licence condition, standard and/or provision of the Broadcasting Services Act 1992.
Note: Sum of categories does not equal total number of investigations completed due to exclusion of completed investigations with no finding; for example, where the complaint is withdrawn.
Source: Broadcasting complaints to the ACMA.

Figure 4.3 ACMA broadcasting investigations for 2012–13 by sector
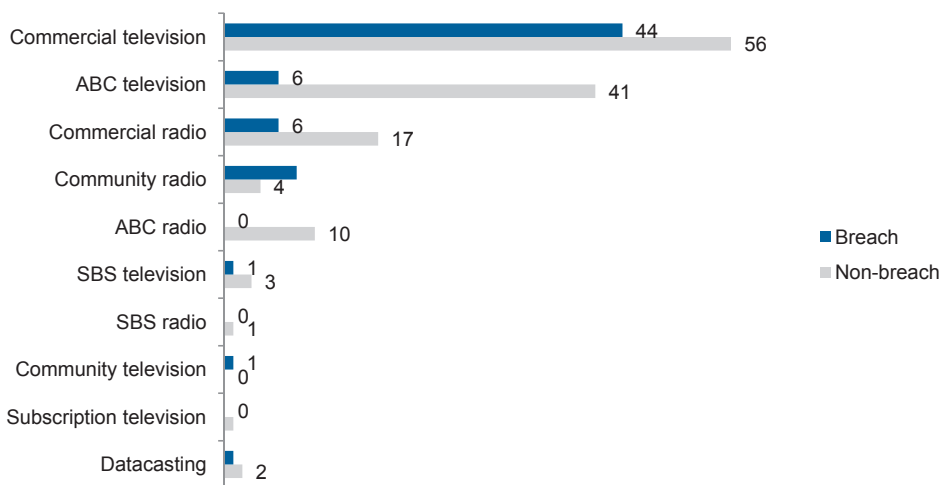
Note: Sum of categories does not equal total number of investigations completed due to exclusion of completed investigations with no finding; for example, where the complaint is withdrawn.
Source: Broadcasting complaints to the ACMA.

Investigating complaints about online content

The online content co-regulatory scheme is established under schedules 5 and 7 to the BSA and dovetails with industry codes of practice. Under the scheme, the ACMA must investigate all valid complaints about online content where the complainant considers that the content may be prohibited.

Prohibited online content is defined by reference to the National Classification Scheme established under the *Classification (Publications, Films and Computer Games) Act 1995*. Content that is classified RC (Refused Classification) and X 18+ is prohibited and, in certain circumstances, content that is classified R 18+ and MA 15+ is also prohibited. Content that has not been formally classified by the National Classification Board, but has been determined by the ACMA as likely to be prohibited, is termed 'potential prohibited' content under the BSA.[12]

During 2012–13, the ACMA received 4,633 complaints (compared to 5,026 during 2011–12) and finalised investigations into 3,793 items of content as at 30 June 2013. Of these, 1,853 individual items were assessed as prohibited or potential prohibited online content (Table 4.8).

If prohibited content is hosted in or provided from Australia, the ACMA must direct the content service provider to remove or prevent access to it (depending on its nature). If prohibited or potential prohibited content is hosted overseas, the ACMA notifies the suppliers of optional end-user Internet Industry Association (IIA) accredited filters. These filters have been tested and accredited by the IIA, as part of the Family Friendly Filter scheme, in accordance with the Internet and Mobile Content Code. Approximately 70 per cent of online content items actioned were classified or likely to be classified as RC (Figure 4.4).

Figure 4.4 Prohibited and potential prohibited content items actioned by actual or likely classification, 1 July 2012 to 30 June 2013
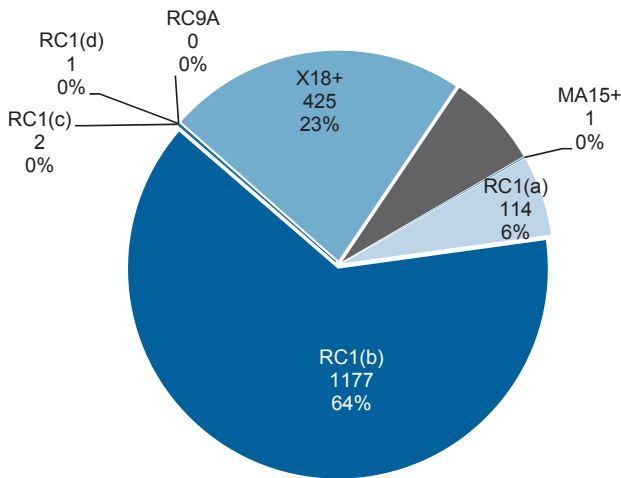
Note: According to the National Classification Scheme, RC1(a)=Content that describes, depicts, expresses or otherwise deals with matters of sex, drug misuse or addiction, crime, cruelty, violence, or revolting or abhorrent phenomena in such a way that they offend against the standards of morality, decency and propriety generally accepted by reasonable adults to the extent that they should not be classified. This includes, but is not limited to, depictions of bestiality, sexual activity accompanied by offensive or abhorrent fetishes, incest fantasies and cruelty or real violence which has a high impact. RC1(b)=Content that describes or depicts in a way that is likely to cause offence to a reasonable adult, a person who is or appears to be, a child under 18 (whether the person is engaged in sexual activity or not). RC1(c)=Content that promotes, incites or instructs in matters of crime or violence. RC1(d)=Computer games that are unsuitable for a minor to see or play. RC 9A=Material that advocates the doing of a terrorist act as set out under section 9A of the Classification (Publications, Films and Computer Games) Act 1995.
Source: Online content complaints actioned by the ACMA.

During 2012–13, a total of 1,845 overseas-hosted prohibited or potential prohibited items were referred to suppliers of optional end-user industry-accredited filters (Table 4.8). The ACMA also issued five final 'take-down' notices for items of Australian-hosted prohibited content. All ISPs issued with a notice removed the content within the required time frame, maintaining 100 per cent compliance with 'take-down' directions.

Table 4.8 Internet content investigations by financial year

	2008–09	2009–10	2010–11	2011–12	2012–13
Complaints					
Complaints* received	1,182	3,212	4,865	5,026	4,633
Invalid[§] complaints	99	118	217	329	115
Investigations					
Investigations terminated[‡]	142	175	174	210	556
Investigations completed[†]	1,003	2,782	3,994	5,403	3,143
Total items[∥] investigated	2,281	3,828	6,587	6,265	3,793
Action taken					
Items actioned[#] (hosted in, or provided from, Australia)	7	25	12	7	8**
Items actioned (overseas-hosted)	1,356	1,907	1,945	2,004	1,845
Items of child abuse and other illegal material referred to law enforcement	926	1,092	1,071	1,130	1,182

*A complaint may not reach investigation stage if the complainant is not eligible to make a complaint or if the complaint is about a matter that the ACMA cannot investigate.
[†]An investigation may relate to one or many items of content. An investigation may be terminated if the ACMA does not have sufficient information to conduct its investigation.
[‡]An investigation may be terminated if the ACMA is of the opinion that is does not have sufficient information to conclude the investigation.
[§]A complaint is not investigated if the complaint is invalid. A complaint is invalid if it does not contain the required information set out at subclause 37(4) of Schedule 7 to the BSA, or has been made by a person not entitled to make a complaint.
[∥]An item relates to an individual page, image or other file.
[#]Action is taken on items assessed as prohibited or potential prohibited.
**Three items of content were removed upon referral to law enforcement prior to any take-down notices being issued by the ACMA.
Source: Online content complaints actioned by the ACMA.

International cooperation to remove online illegal content

The ACMA places a high priority on acting promptly and effectively against prohibited or potential prohibited online content deemed 'sufficiently serious'. This includes child sexual abuse, advocating the doing of a terrorist act, or promoting, inciting or instructing crime or violence. The ACMA refers this content to either an Australian law enforcement agency or a law enforcement-endorsed overseas agency through the International Association of Internet Hotlines (INHOPE), of which the ACMA is a long-term member. INHOPE coordinates a network of international hotlines to take swift action in response to reports of illegal content.
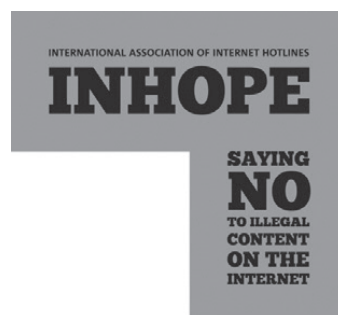
Interactive gambling

Under the *Interactive Gambling Act 2001* (the IGA), the ACMA is responsible for investigating complaints about alleged prohibited internet gambling content[13] and for registering industry codes of practice dealing with internet interactive gambling matters.

During 2012–13, the ACMA received 121 complaints and general enquiries under the IGA. Of the 23 investigations completed in the period, 10 resulted in identification of the location of overseas-hosted prohibited internet gambling content. These services were referred to makers of filter software in accordance with the code of practice registered under the IGA. They were also referred to the Australian Federal Police. Eleven investigations of overseas-hosted sites resulting in non-breach findings, while two investigations were terminated due to insufficient information.

In the reporting period, the ACMA received complaints about five URLs that referred to potentially prohibited Australian-hosted internet gambling content. The ACMA considered that four URLs warranted referral to the police for further investigation.

Endnotes

[1] See Television Program Standard 23—Australian Content in Advertising.

[2] Commentary on compliance with annual captioning targets was not available at the end of the reporting period.

[3] Broadcasting Services (Television Captioning) Standard 2013.

[4] Following amendments to the BSA in April 2012, the 2007 licence condition was replaced by the Broadcasting Services (Regional Commercial Radio – Material of Local Significance) Licence Condition 2012 (the 2012 licence condition). The 2012 licence condition commenced on 3 October 2012 and imposes the same local content obligations on regional commercial radio licensees but, consistent with the BSA as amended, does not apply to remote area service radio licensees, regional racing service radio licensees and licensees of licences allocated under section 40(1) *Broadcasting Services Act 1992.*

[5] The obligation on all other trigger event affected licensees to maintain levels of local presence was also reduced to 24 months and the obligation on licensees to broadcast local content and maintain minimum service standards was reduced from 52 weeks to 47 weeks per year.

[6] The simulcast period is defined in clause 2 of Schedule 4 of the BSA.

[7] The community digital television services provided in Adelaide and Perth are not provided under community broadcasting licences, but under open narrowcasting television class licences.

[8] DBCDE, *Digital Tracker Summary Report*, Quarter 2, April to June 2013.

[9] *Nielsen Company Radio Ratings, Survey #4, 2013 All People 10+ Mon-Sun 12:00 am to 12:00 a m, GfK Marketscope Report Q2 2013*—Commercial Radio Australia Media Release, 9 August 2013.

[10] This includes ten investigations which were concluded where, for example, the complaint was withdrawn.

[11] This does not include 2,680 complaints and enquiries received about 2DAY's *Summer 30* program broadcast on 4 December 2012.

[12] Potential prohibited content is defined at clause 21 of Schedule 7 of the BSA.

[13] Under the IGA, the ACMA must refer prohibited gambling internet content hosted in Australia which it considers worthy of investigation to an Australian police force for further investigation.

Chapter 5
Consumer benefits from participating in the digital economy

Overview

Chapter 5 focuses on consumer benefits in relation to growing participation in the digital economy as represented by increased used of the internet for social and economic activities. Available data relating to increased participation in the digital economy is examined in the context of three broad themes relating to growth in:

> levels of internet connectivity

> capabilities as evidenced by increased frequency of internet use

> confidence in using the internet as represented by the increased range and number of activities and the value of economic transactions performed online.

Data relating to change in participation levels is presented for 2012–13 and where available, for the period June 2008 to June 2013 to highlight the long-term trends in Australia.

Connectivity

Connectivity refers to the take-up of the internet as a facilitator of participation in the digital economy and consumers deriving benefits from the broader digital economy. This section focuses on take-up of the internet by individuals and businesses.

Take-up of the internet

Internet access is available to Australians via a range of networks, devices and locations. Most Australians now have access to the internet and go online from a range of locations—home, work, at other locations and including while in transit.

There has been steady growth in the proportion of adult Australians with access to the internet in the home and a large increase in the use of the internet via mobile phone handsets (Figure 5.1). For example, Australians with:

> home internet access increased by 24 per cent since June 2008 and two per cent since June 2012 to reach 14.24 million people at June 2013

> access to a home broadband internet service increased by 46 per cent since June 2008 and seven per cent since June 2012 to reach 13.15 million people at June 2013.

The number of people using the internet via a mobile phone handset increased by 510 per cent since June 2008 and 33 per cent since 2012 to reach 7.50 million active users at June 2013.[1] This reflects the greater take-up of internet-enabled mobile handsets and the expansion of mobile networks in Australia.

Figure 5.1 Change in access to the internet, 2008 to 2013
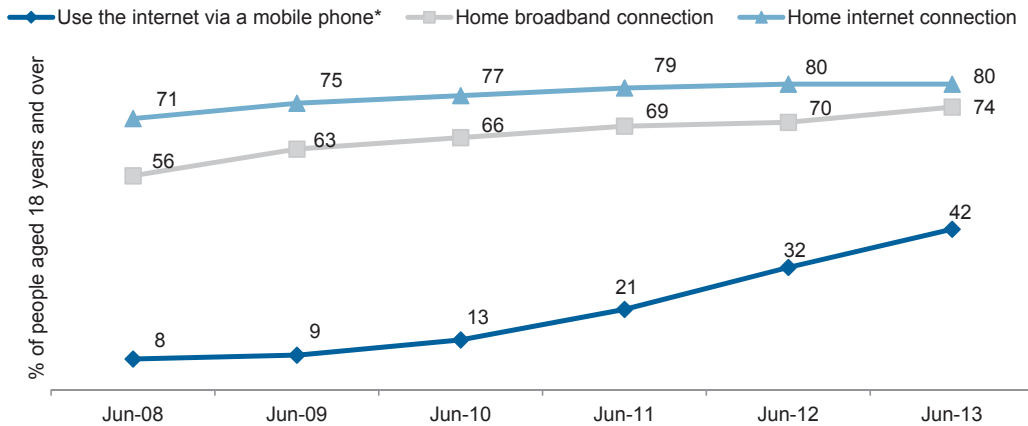
Relates to use of the internet via a mobile phone handset during the month of June.
Source: Roy Morgan Single Source.

Take-up of the internet in the home has seen large increases since 2008 across all age groups (Figure 5.2) to the point where the majority of Australians, within each age group, have access to some form of internet service in the home. There was also significant growth in the use of mobile phone handset internet services across all age groups, with the majority of people aged 18–44 accessing the internet via their mobile phones during June 2013.

Figure 5.2 Change in access to the internet, by age
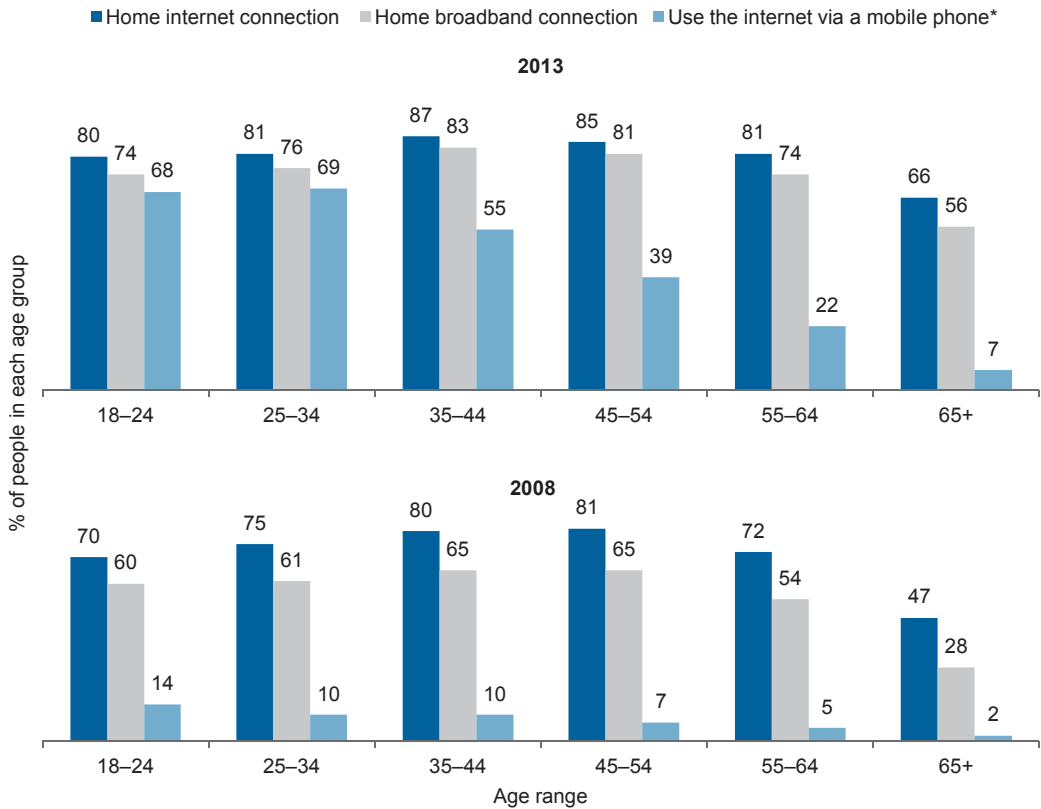
■ Home internet connection ■ Home broadband connection ■ Use the internet via a mobile phone*

2013

Y-axis: % of people in each age group

Age range	Home internet connection	Home broadband connection	Use the internet via a mobile phone*
18–24	80	74	68
25–34	81	76	69
35–44	87	83	55
45–54	85	81	39
55–64	81	74	22
65+	66	56	7

2008

Age range	Home internet connection	Home broadband connection	Use the internet via a mobile phone*
18–24	70	60	14
25–34	75	61	10
35–44	80	65	10
45–54	81	65	7
55–64	72	54	5
65+	47	28	2

Age range

Relates to use of the internet via a mobile phone handset during the month of June.
Source: Roy Morgan Single Source.

International trends—access to the internet
While there is limited, current internationally-comparable data available, the data that
is available allows a broad level comparison of internet adoption levels between
Australia, the USA and the European Union (EU) (Table 5.1). In terms of general
internet access in the home, home broadband connectivity and internet use via mobile
phone handsets, Australia is broadly comparable to the UK.

Table 5.1 International trends in access to the internet, 2013

Country	Home internet access		Have home broadband connection		Used mobile phone to access the internet	
	2012	2013	2012	2013	2012	2013
Australia*	80%	80%	70%	74%	32%	42%
USA[2]	n/a	n/a	66%	70%	53%	60%
UK[3]	79%	80%	76%	75%	39%	49%
EU[4]	64%	68%	56%	61%	n/a	n/a

*Refers to total population aged 18 years and over. Internet use via mobile phones relates to use during the months of June 2012 and 2013. Mobile phone internet use increases to 52 per cent and 62 per cent in Australia when taken over a six month period to May 2012 and May 2013.
Note: Data for the UK and EU about home internet access and broadband connection relates to households. The period of mobile phone internet use is not defined for the UK and USA.
Sources: Data relating to Australia, ACMA-commissioned research May 2012 and 2013, UK Ofcom, US Pew Internet Project, and EU data sourced from Eurobarometer.

Complementary internet services

The majority of Australians using the internet via their mobile phone handset also had access to other internet services in the home. Of the 7.50 million adult Australians who used the internet via their mobile phone handsets during June 2013:

> 63 per cent also had access to a fixed-line home internet connection (usually ADSL or cable)

> 33 per cent had access to other mobile wireless internet services such as mobile dongles/USB modem/data card services, or satellite internet

> only four per cent had no other internet access in the home.

A further reflection of the complementary nature of mobile phone internet use is the fact that 27 per cent of these users identified their mobile handset as their most used internet access device in the six months to May 2013, compared to 33 per cent identifying a laptop computer, 22 per cent a desktop computer, and 12 per cent a tablet computer.[5]

Locations of internet use

During the June quarter of 2013, many people accessed the internet at several locations. The most commonly reported sites to access the internet were the home (98 per cent of active internet users), work (50 per cent), a friend's place (19 per cent), a Wi-Fi hotspot (16 per cent), and other locations such as libraries, schools and internet cafes (25 per cent of active internet users during this period).[6]

The use of the internet via mobile phones from Wi-Fi hotspots or from 'piggy-backing' off an existing alternative home internet network saw significant increases in the 12 months to May 2013—26 per cent and 21 per cent respectively (Figure 5.3).

Figure 5.3 Location of internet use via mobile phone handsets in the six months to May
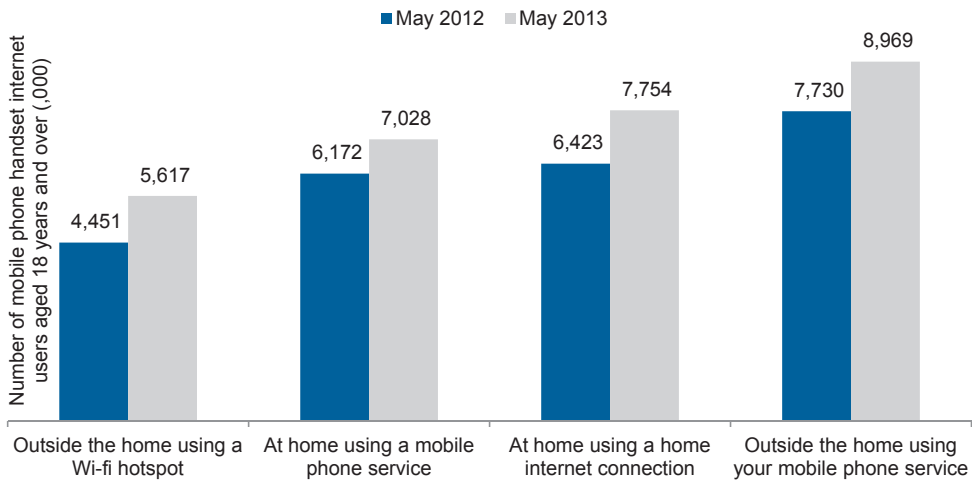
Note: 'At home using a home internet connection' relates to use of a wireless router.
Source: ACMA-commissioned research, May 2012 and May 2013.

Australian business enabling online participation

Domain name registrations

Australian businesses and organisations continue to recognise the importance of establishing an online presence to enable them to expand the reach of their goods and services and connect with existing and new customers regardless of location. This is reflected in the ongoing growth of '.au' domain name registrations and the availability of online channels consumers can use.

The .au country code for Australian domain names is administered by .auDA (.au Domain Administration Ltd) and covers the second-level domains of '.com.au', '.edu.au', '.org.au', '.asn.au' and '.id.au'.

In the 12 months to June 2013, domain names registered under .au increased by nine per cent to 2.67 million (Figure 5.4). The '.com.au' domain accounts for 86 per cent of second-level domains.

Figure 5.4 Number of '.au' domain names registered
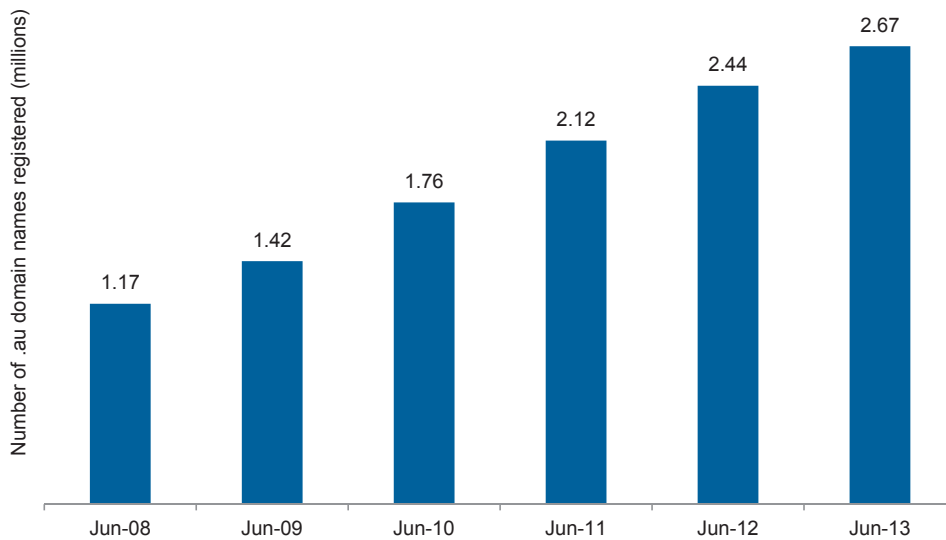
Note: Excludes domain name registrations under '.gov.au'.
Source: auDA and Aus Registry 2013.

Domain names under '.gov.au' are administered by the Australian Government Information Management Office. At June 2013, 4,666 '.gov.au' domain names were registered, down from 4,756 at June 2012.[7]

Domain names support a diverse range of web-based services that Australian consumers are using increasingly. Figure 5.5 presents examples of these services and related number of users.

Figure 5.5 Consumer use of select online business channels during 2012–13
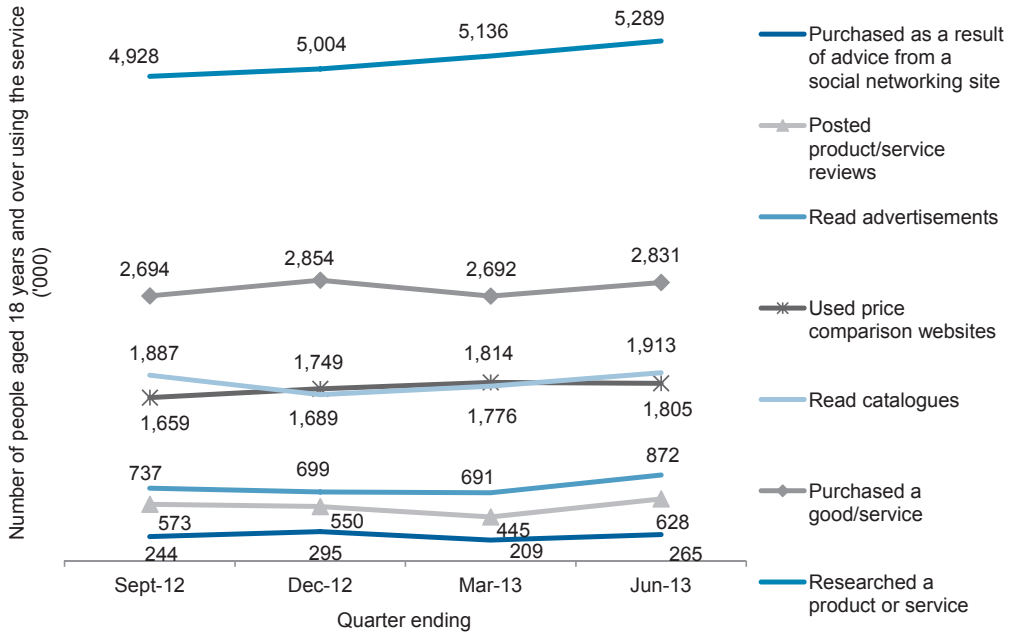
Source: Roy Morgan Single Source.

Capability

The internet offers Australians a range of services, content and communications channels that are intrinsic to undertaking day-to-day social and economic activities. In this context, Australians are continuing to develop their capabilities within the digital economy to become effective participants and digital citizens. Frequency of internet use is increasing as is the scope and variety of activities undertaken online, indicating the continuing development of digital economy capabilities.

Growth in frequency of internet use

The trend towards more frequent use of the internet continued during 2012–13 (Figure 5.6). During June 2013, 65 per cent of adult internet users (11.56 million people) went online more than once a day (referred to here as frequent internet users), compared to:

> 62 per cent (10.81 million) during June 2012—a seven per cent increase.

> 49 per cent (6.70 million) during June 2008—a 72 per cent increase.

Figure 5.6 People accessing the internet more than once a day
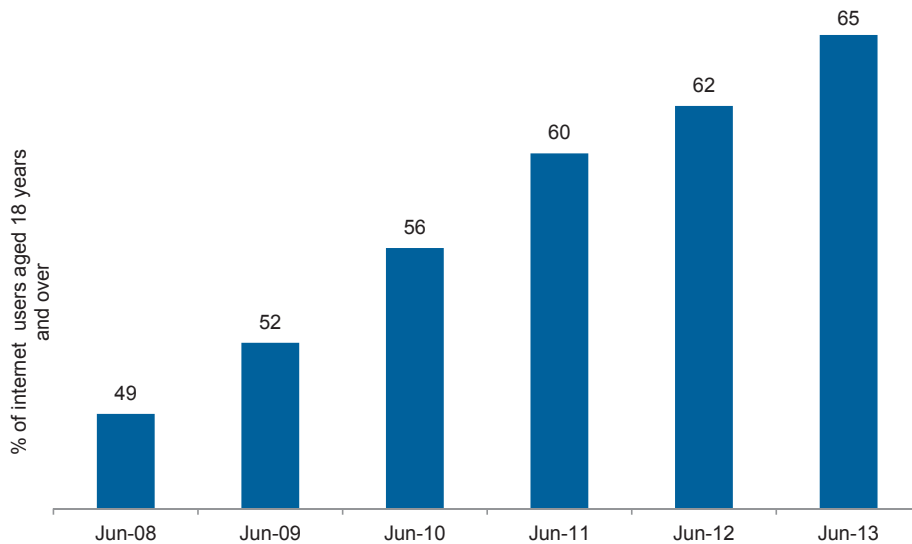
Base: People who have ever accessed the internet.
Source: Roy Morgan Single Source.

Frequency of internet use by age

The trend towards more frequent online participation is reflected across all age groups in Australia with increases in the number of frequent internet users by age during 2012–13 being:

> three percentage points for people aged 18–24, up by 144,000 people
> four percentage points for people aged 25–34, up by 222,000 people
> three percentage points for people aged 35 to 44, up by 6,000 people
> one percentage points for people aged 45 to 54, up by 54,000 people
> five percentage points for people aged 55–64, up by 148,000 people
> two percentage points for people aged 65 and over, up by 145,000 people.[8]

The shift to more frequent internet use has been even more pronounced over the June 2008 to June 2013 period (Figure 5.7) with increases in frequent internet use by age being:

> 27 percentage points for people aged 18–24, up by 751,000 people
> 21 percentage points for people aged 25–34, up by 941,000 people
> 19 percentage points for people aged 35 to 44, up by 681,000 people
> 12 percentage points for people aged 45 to 54, up by 521,000 people
> 15 percentage points for people aged 55–64, up by 629,000 people
> 10 percentage points for people aged 65 and over, up by 580,000 people.[9]

Figure 5.7 Frequency of internet use, by age

2008 | 2013

More than once a day

2008: 30, 45, 52, 52, 54, 49
2013: 40, 60, 64, 71, 75, 76

Once a day

2008: 16, 13, 12, 13, 13, 14
2013: 16, 11, 11, 10, 7, 5

A few times a week

2008: 20, 18, 16, 16, 13, <1
2013: 16, 11, 9, 6, <1, 3

Legend:
- 65 +
- 55–64
- 45–54
- 35–44
- 25–34
- 18–24

Once a week

2008: 5, 4, 3, 3, 3, 2
2013: 3, 2, 1, <1, 1, 0.1

A few times a month

2008: 5, 4, <1, <1, <1, <1
2013: 4, 1, <1, <1, <1, <1

% of internet users in each age group
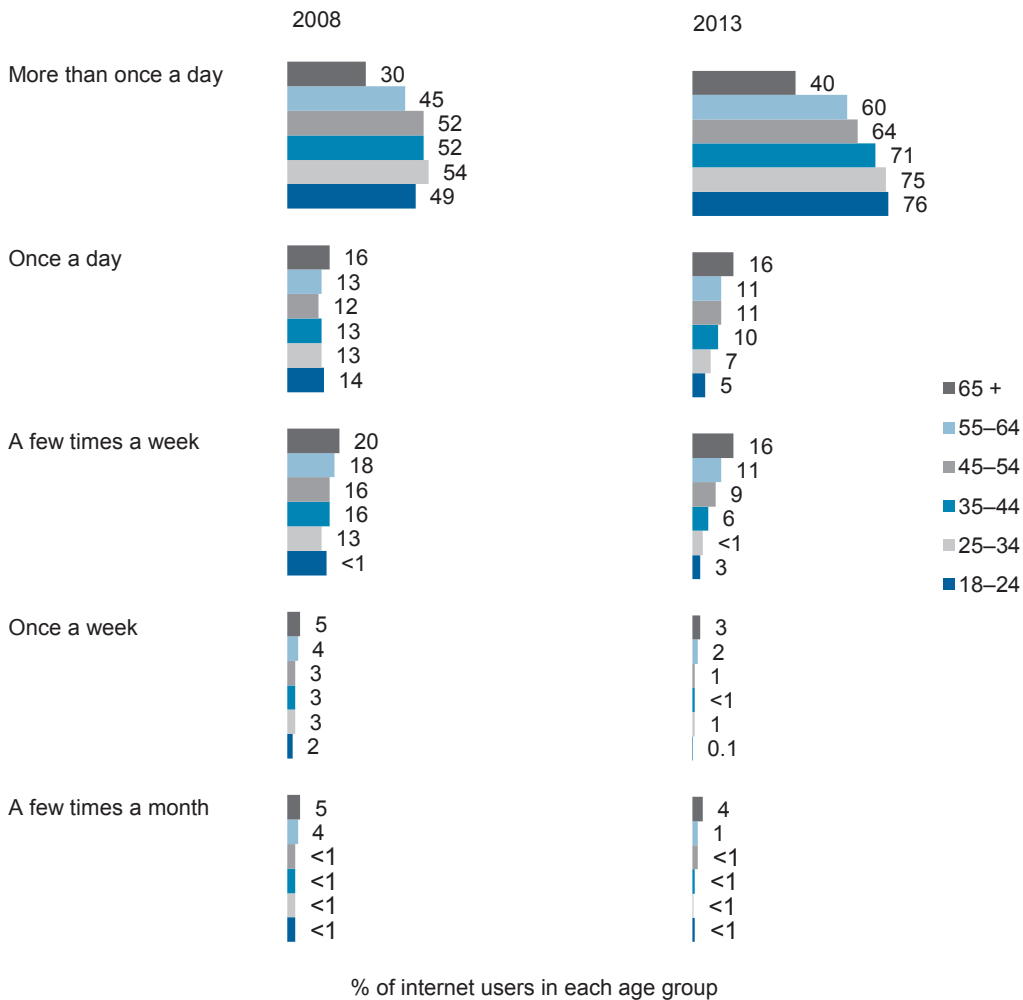
Base: People who have ever accessed the internet.
Note: Respondents accessing the internet less than once a month are not identified separately in the time series due to methodological changes.
Source: Roy Morgan Single Source, June 2013.

Activities undertaken online

Australians undertake a diverse range of activities online (Figure 5.8). In general terms there was minimal growth in users undertaking these activities, with the exception of the following:

> downloading video or audio content—up three percentage points (945,000) to reach 7.92 million people

> streaming video or audio content—up three percentage points (984,000) to reach 9.26 million people

> social-networking activities—up three percentage points (982,000) to reach 10.40 million people

> banking or paying bills online—up three percentage points (1.21 million) to reach 12.86 million people.

Figure 5.8 Activities performed online in the six months to May

■ May 2013 ■ May 2012

Activity	May 2013	May 2012
Sending or receiving email	96	95
Using the internet to research or gather information	95	94
General web browsing or surfing	95	94
Banking or paying bills online	80	77
Using a cloud computing service	79	71
Buying or selling goods or services	65	63
Using social networking sites such as Facebook, LinkedIn	65	62
Streaming video or audio content	58	55
Using the internet to work from home or study	58	57
Accessing or submitting information to government websites or services	56	56
Downloading a mobile application	55	
Accessing professional online video content (OVC) services	49	43
Downloading video or audio content	49	46
Accessing online gaming	22	23

% of internet users aged 18 years and over

Note: Data relating to downloading of mobile applications in the six months to May 2012 not available.
Source: ACMA-commissioned research May 2012 and May 2013.

Activities undertaken online by age

In general, patterns of internet use tend to be similar across all age groups, with some age-based differences (Table 5.2):

> the three most popular online activities across all age groups is general internet browsing, using email and using the internet for research

> banking and paying bills online is the fourth most popular activity across all age groups except for 18 to 24-year-olds

> buying and selling goods and services online was the fifth most popular activity for internet users aged 35–64

> social networking was in the top five popular activities for 18 to 34-year-olds

> other activities in the top five popular activities include steaming of video and audio content (87 per cent of 18 to 24-year-olds) and accessing or submitting information to government websites or services (46 per cent of people over 65 years).

Table 5.2 Popularity of online activities, by age

Popularity of activity	Age groups					
	18–24	25–34	35–44	45–54	55–64	65+
Most popular activity	Browsing 99%	Browsing 99%	Research 98%	Email 95%	Research 93%	Email 95%
2nd most popular	Research 97%	Email 97%	Email 98%	Research 94%	Email 92%	Research 89%
3rd most popular	Email 96%	Research 96%	Browsing 97%	Browsing 93%	Browsing 91%	Browsing 85%
4th most popular	Social networking 94%	Banking 92%	Banking 90%	Banking 77%	Banking 72%	Banking 60%
5th most popular	Streaming 87%	Social networking 82%	Buying or selling 74%	Buying or selling 67%	Buying or selling 56%	Using govt websites 46%

Note: Decimal points which differentiate between some activities are not shown.
Source: ACMA-commissioned research, May 2013.

Confidence

Australians are demonstrating an ever-increasing confidence in the digital economy. Research shows a broadening participation in a greater range of online activities, including over mobile devices, an increase in online spending and downloading of greater amounts of data. This in turn reflects an increasing level of comfort with online processes and growing trust in methods of online delivery.

Trust and confidence in the online environment

Participation in the digital economy
Digital consumers are gaining confidence in the activities they perform online, as represented by the general increase in type and intensity of activities undertaken online. Facilitated by market factors such as increased availability of higher speed internet services and innovation in internet-enabled consumer devices such as smartphones and tablets, online activities are seemingly becoming an integral part of everyday Australian life.

Figure 5.9 illustrates the changes in intensity of online activities between June 2008 and June 2013, with a:

> 31 percentage point increase in the number of people undertaking five or more online activities during June

> 20 percentage point decrease in numbers of people undertaking between one and four online activities during June

> 10 percentage point decrease in the number of Australian not using the internet during June.

Figure 5.9 Number of different online activities undertaken during June
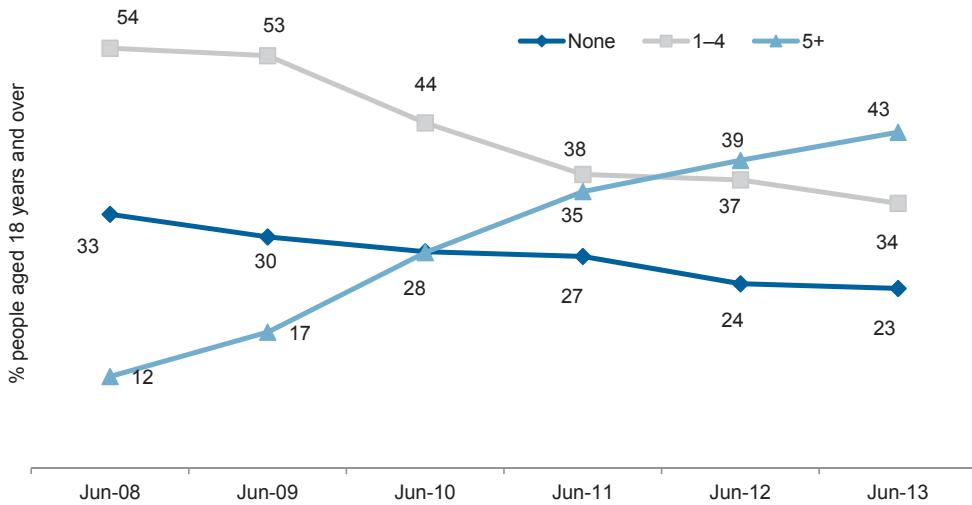
Source: Roy Morgan Single Source.

While 18 to 34-year-olds lead in terms of the number of types of internet activities performed, the increase in the number of activities performed online is not exclusive to the younger age group, with increases occurring across all age groups from June 2008 to June 2013 (Figure 5.10). In particular:

> The largest increases occurred in the groups performing six or more online activities.

> In 2008, eight per cent of those aged 18–24 performed six or more types of online activities, with this percentage decreasing across the age groups to two per cent for those aged 65 and over. In 2013, 45 per cent of those aged 18–24 performed six or more types of online activities, with the 25 to 34-year-olds surpassing this at 52 per cent, and those aged 65 and over increasing to 16 per cent.

> The average number of online activities performed by 18 to 34-year-olds in 2008 was 3.5, increasing to 4.8 in 2013. The average number of online activities performed by those aged 65 and over increased from 2.5 to 3.5.

Figure 5.10 Intensity of online activities by age

No. of activities ■ One ■ Two ■ Three ■ Four ■ Five ■ Six ■ Seven

June 2013

June 2008

Age
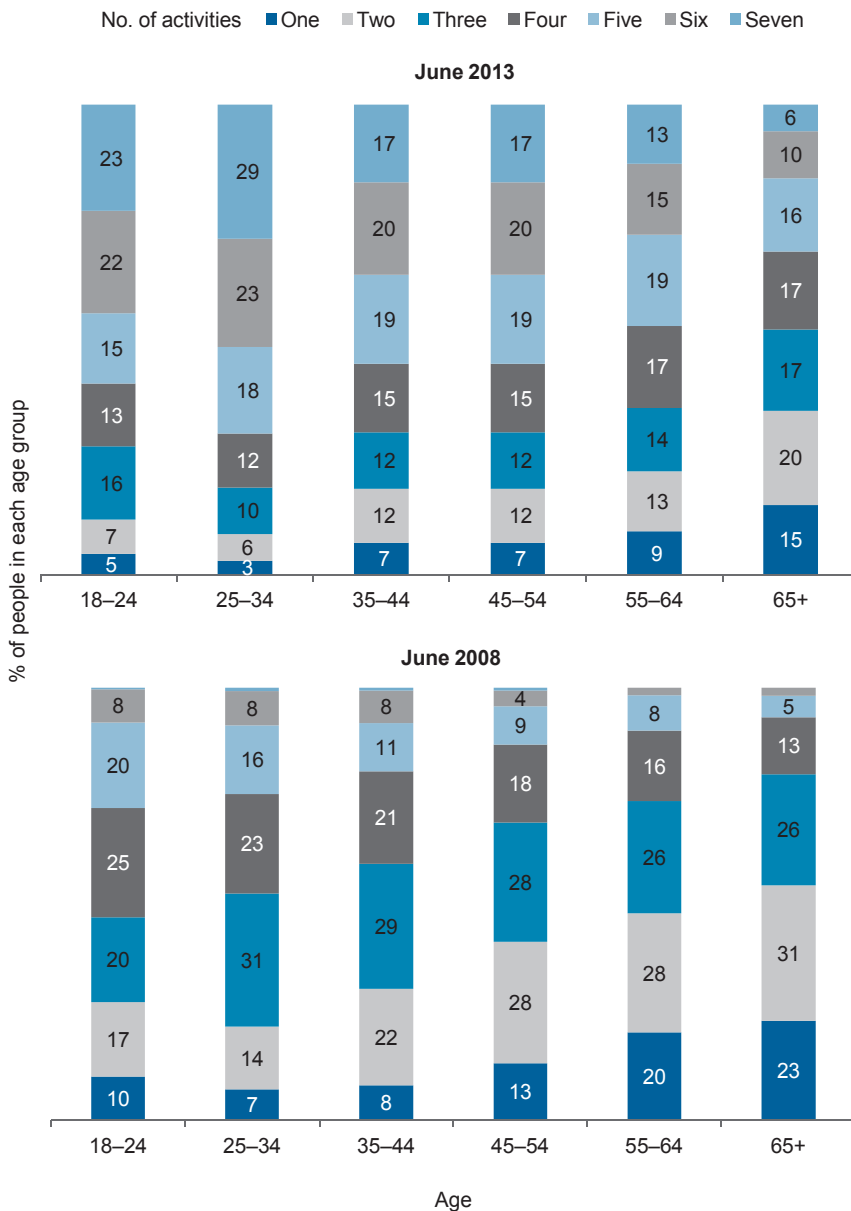
Note: Percentages ≤2 are not marked in this figure.
Source: Roy Morgan Single Source.

Activities performed online via mobile phones and computers

Online participation has changed significantly during the period June 2008 to June 2013. Many more Australians are using their mobile phones to access online content, with the difference between the level of online activities being performed on computers and on mobile phones reducing (Figure 5.11). In proportional terms:

> communications activities and research and information activities continue to remain the top two online activities performed on mobile phones and computers

> while use of mobile phones for online banking and financial transactions and for shopping has increased significantly over the period, the level of activity is still considerably lower than that being undertaken online via computers
> blogging and online community activities performed via mobile phones have surpassed those performed on computers
> use of mobile phones to go online for entertainment and amusement purposes has increased significantly to now be virtually as prevalent as using computers.

Figure 5.11 Online activities undertaken by device

% of people using a device to access the internet
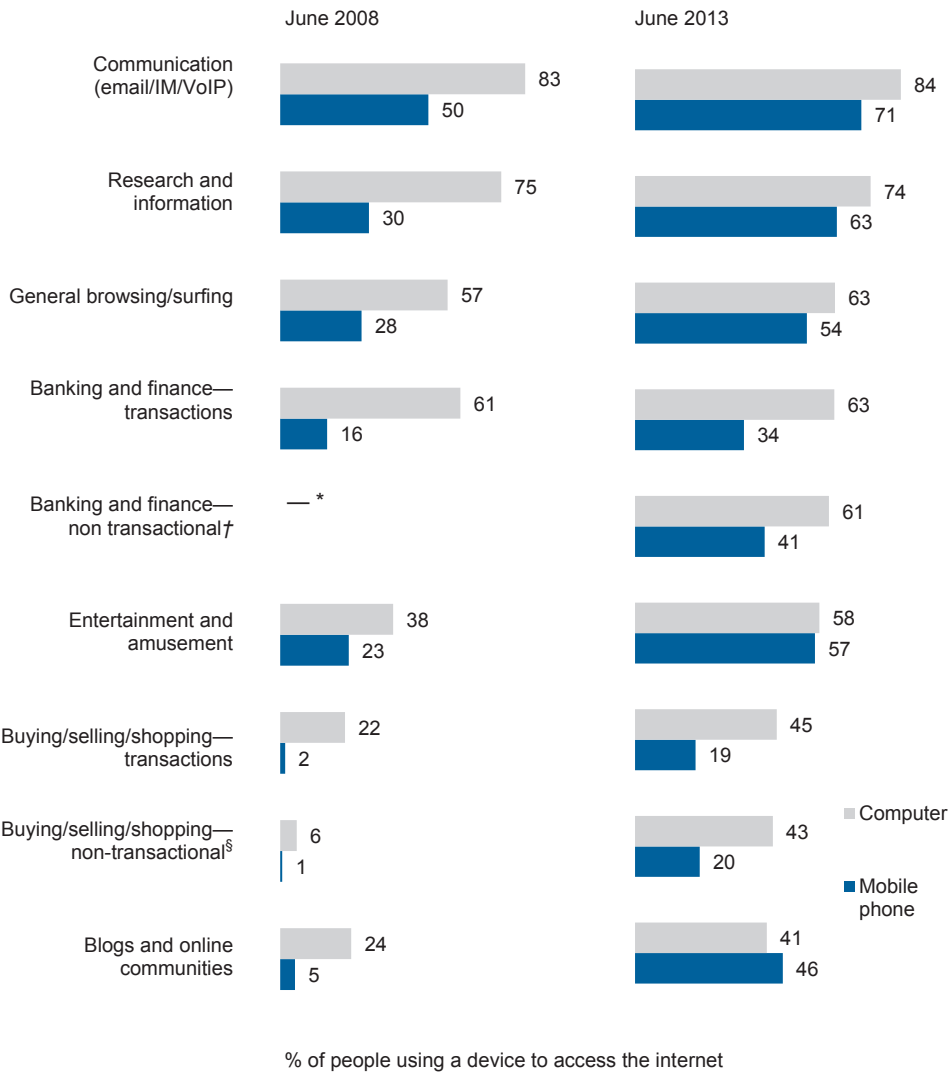
*Data not available prior to October 2010.
†Includes checking balances, viewing statements, checking/applying for financial products, checking home loan rates and locating ATMs.
‡Some sub-categories not captured prior to October 2010 due to changes in methodology.
§Refers to researching products, excluding transactional activities.
Base: People aged 18 years and over. Source: Roy Morgan Single Source.

International trends—smartphone take-up and online participation

ACMA research shows that market factors such as the rapid adoption of smartphones, the growth in use of mobile applications and the availability of more generous and affordable data allowances have been significant contributors to the general increase in online activities performed via mobiles.[10] Developments in Australia also reflect trends internationally. For example, research shows that smartphone users in the UK were more likely to access the internet via their mobile and carry out a greater variety of mobile phone internet activities than other mobile phone internet users.[11]

Impacts

The internet has facilitated changes in the way consumers undertake every day social and economic activities. As participation in the digital economy broadens, the internet is increasingly both a provider of new opportunities for many Australian businesses and a challenge to the traditional business models of others. This section examines some of the more prominent impacts of the internet.

Growth of e-commerce

Revenue derived by Australian businesses from the sale of goods and services online is continuing to increase, demonstrating the ongoing significance of e-commerce to the digital economy. The latest available data from the ABS shows that Australian businesses generated an estimated $237 billion in revenue from the online sales of goods and services during 2011–12, a 25 per cent increase over 2010–11 and a 193 per cent increase over 2007–08 (Figure 5.12).

Figure 5.12 Value of internet commerce, Australia
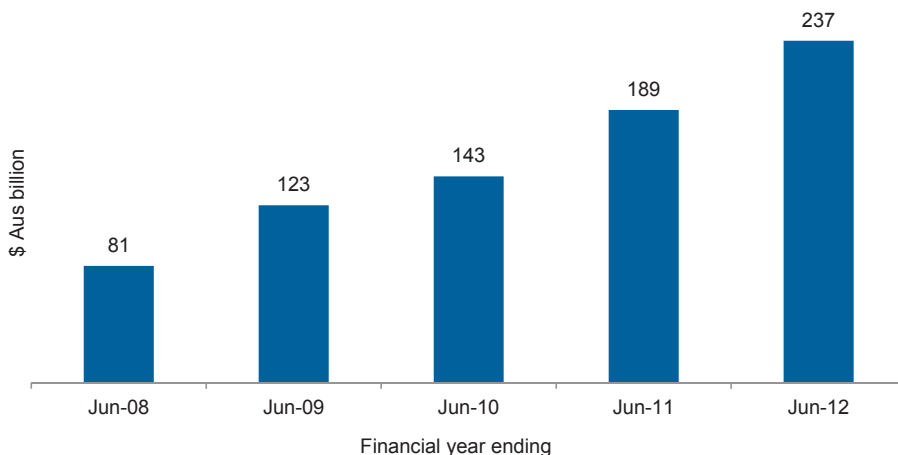
Note: ABS defines internet e-commerce as the purchase/order of goods and services online regardless of whether or not the purchases were paid for online.
Source: ABS, 8166.0—Summary of IT Use and Innovation in Australian Business, 2011–12, June 2013.

A large number of Australians—an estimated 13.67 million people—continue to undertake online transactional activities. These include banking, paying bills, buying and/or selling goods and services. This is an increase of eight per cent in the 12 months to May 2013.[12]

The significant growth in the numbers of Australians shopping online and the value of e-commerce in Australia is comparable with international experience. For example, Figure 5.13 shows that in 2011 Australians were second only to the UK (out of 19 countries in the survey) in terms of their average annual expenditure on online purchases.

Figure 5.13 Average annual expenditure on online purchases
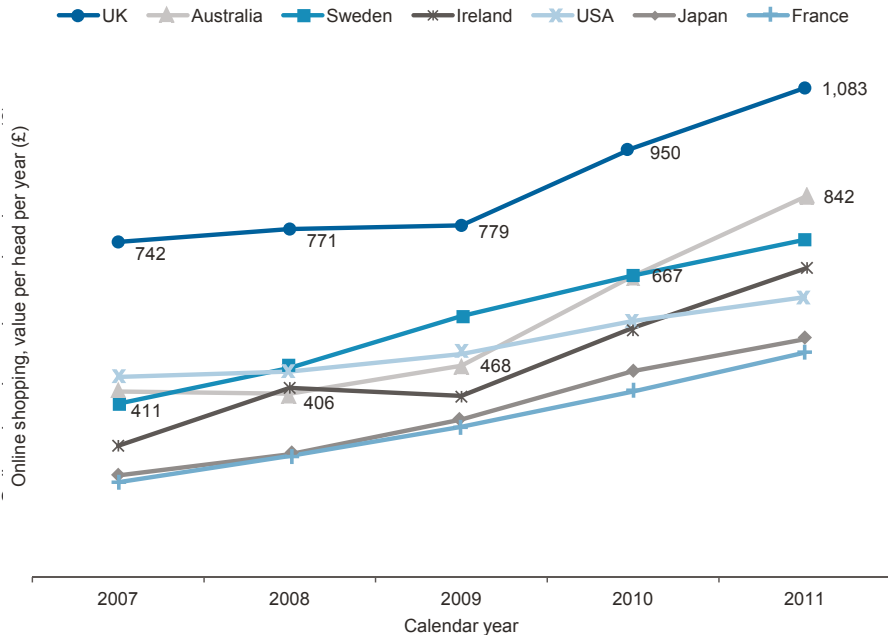
Source: Ofcom, Value of B2C e-commerce per head, 2007–2011, http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr12/international/7.08.

Increasing volumes of data being downloaded

As outlined in Chapter 1, the volume of data downloaded by Australian internet subscribers continues to increase dramatically, with 676,898 terabytes downloaded during the June quarter of 2013, an increase of 59 per cent in relation to the June quarter of 2012.[13] While growth in the volume of data downloaded reflects that users are participating more intensely in online activities, it also indicates the increased availability and popularity of online content.

In the six months to May 2013, an estimated 11.27 million Australians aged 18 years and over accessed some form of content online for entertainment purposes, an increase of 14 per cent in relation to the six months to May 2012.[14]

Changing behaviours

As consumers grow more confident accessing services and interacting online, they also exhibit changes in the way they undertake traditional day-to-day activities. Some examples follow:

Changing communication preferences
> Traditional global telephone traffic grew three per cent to 317 billion minutes, while VoIP traffic grew 25 per cent to 150 billion minutes during 2012.[15] In addition, 5.33 million Australians went online to make video calls in the six months to May 2013.

> 10.40 million Australians went online for social networking purposes in the six months to May 2013, a 10 per cent increase over the 9.42 million doing so in the six months to May 2012. Nearly 1.55 million adult Australians identified online social networking as their most used communications channel in the six months to May 2013, compared to 1.16 million during the six months to May 2012, a 34 per cent increase.

Growth in professional online video content services
> Users of professional services, such as catch-up TV, IPTV and video-on-demand, increased by 52 per cent to 7.86 million people in the 12 months to May 2013.

> Changes to the way people are accessing video content is reflected in growth of the availability of online video content services—for example, Quickflix reported a growth of 17 per cent to its customer base at December 2012;[16] Hoyts is expanding its business model to offer video-on-demand services in addition to its cinema, DVD rental and screen advertising operations.[17] In addition, traditional free-to-air broadcasters continue to increase the range of content available to users of their online catch-up services.

> Five million Australians accessed online radio stations in the six months to May 2013, a six per cent increase compared to 4.70 million in the six months to May 2012.

Changing the way we work
> Digital workers—people using the internet to work away from their main place of employment—comprise 51 per cent of the total number of employed people in Australia, an estimated 5.64 million Australians aged 18 years and over at May 2013.[18,19] This development reflects growing acceptance of working arrangements such as teleworking and the potential for similar flexible working arrangements to reduce operating costs, retain skilled staff and improve general productivity.

Shifting to cloud-based service delivery
> The move to personal cloud services has emerged as a result of increasing network capacity and the use of multiple devices to access the internet. ACMA research shows 14.00 million Australians used a cloud service (including email and social-networking services) in the six months to May 2013, an 11 per cent increase compared to 12.57 million using these services in the six months to May 2012.[20]

Interacting with government
On the back of ACMA research, which shows that 82 per cent of Australians internet users at June 2012 expect to deal with business and government online[21], 8.95 million people accessed government (local, state and federal) services online in the six months to May 2013. This is a seven per cent increase from the 8.39 million people accessing e-government services in the six months to May 2012.

Endnotes

[1] Roy Morgan Single Source, June 2008 and June 2013.

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[11] Ofcom, *Adults' media use and attitudes report 2013,* 23 April 2013.

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[16] David Edwards, 'Quickflix posts 33% revenue growth for 1H13', *Communications Day*, 4 March 2013.

[17] Stephen Withers, 'Hoyts picks Viocorp for video on demand', *CommsWire*, 7 March 2013.

[18] ACMA-commissioned research, May 2013.

[19] Including people using the internet to work away from the office outside 'standard working hours' and teleworkers who are allowed to work away from the office, substituting coming into the office for part or all of the day.

[20] ACMA-commissioned research, May 2012 and May 2013.

[21] ACMA, *Communications report 2011–12.*

Glossary

2G—second generation mobile telecommunications

Mobile telecommunications services that use digital techniques, providing voice communications and a relatively low transmission rate for data.

3G—third generation mobile telecommunications

Broadband mobile telecommunications services supporting both voice channels, and IP-based video and data services.

4G—forth generation mobile telecommunications

Enhanced broadband mobile telecommunications services supporting voice, video and data services over an all IP network.

ABC—Australian Broadcasting Corporation

Free-to-air national broadcaster of ABC radio and television channels, as well as online services, funded by the Australian Government.

ABS—Australian Bureau of Statistics

Commonwealth body responsible for collecting, analysing and publishing Australian demographic data.

ACCC—Australian Competition and Consumer Commission

Commonwealth regulatory body with responsibilities derived from the *Competition and Consumer Act 2010* (formerly the *Trade Practices Act 1974*).

ACE—Australian Communication Exchange

A national non-for-profit organisation that currently provides the relay component of the National Relay Service.

ACMA—Australian Communications and Media Authority
Commonwealth regulatory authority for broadcasting, online content, radiocommunications and telecommunications, with responsibilities under the *Broadcasting Services Act 1992*, the *Radiocommunications Act 1992*, the *Telecommunications Act 1997* and related Acts. Established on 1 July 2005 following a merger of the Australian Communications Authority and the Australian Broadcasting Authority.

ADSL—asymmetric digital subscriber line
A transmission technology that enables high-speed data services to be delivered over a twisted pair copper line, typically with a download speed in excess of 256 kbit/s, but with a lower upload data speed.

ADSL2
Allows for increased line speeds and new power-saving elements, and extends the reach of the original ADSL specification.

ADSL2+
This revised version of ADSL2 enables increased speeds by increasing the frequency range used on the twisted pair copper line.

AFP—Australian Federal Police
Australia's national police force. The ACMA works with the AFP on email spam and illegal internet content such as child pornography that is hosted outside Australia.

AISI—Australian Internet Security Initiative
Collects data on computers that are operating as zombies, analyses this data and provides free daily reports to participating Australian internet service providers (ISPs) on the zombie computers operating on their networks.

AMTA—Australian Mobile Telecommunications Association
Association of mobile industry suppliers and manufacturers.

auDA—.au Domain Administration
Organisation established to develop an effective self-regulatory regime for internet domain names in Australia.

ARPU—average revenue per user
Income that is calculated by dividing a provider's total revenue by the number of subscribers or communications devices to that network.

bandwidth
The range of frequencies available to be occupied by signals. In analog systems it is measured in hertz (Hz) and in digital systems in bits per second (bit/s). Generally, the higher the bandwidth, the greater the amount of information that can be transmitted in a given period.

bit/s—bits per second
Rate of transfer of data. See also **Gbit/s**, **kbit/s**, **Mbit/s**.

broadband
Typically defined as internet access with a download speed of greater or equal to 256 kbit/s. Broadband is implemented through a range of technologies such as optical fibre, DSL, HFC cable, mobile broadband, fixed wireless and satellite. Broadband is an 'always-on' technology which does not tie up a telephone line exclusively for data.

BSB—broadcasting services bands
Parts of the radiofrequency spectrum dedicated to broadcasting services.

carrier
The holder of a telecommunications carrier licence in force under the *Telecommunications Act 1997*.

catch-up TV
Internet service typically provided on free-to-air and subscription broadcasters' websites enabling users to watch a recent episode of a television program over the internet for a limited period of time.

CEASA—Commercial Economic Advisory Service of Australia
An information research company specialising in media, economic, marketing and advertising research, surveys and publications.

cloud computing
Internet-based computing where data and applications are hosted online, stored on remote servers and available to clients on demand through broadband internet-enabled devices.

Communications Alliance (CA)
Industry organisation formed on 1 September 2006 from the merger of the Australian Communications Industry Forum (ACIF) and the Service Providers Association Network (SPAN).

CSG—Customer Service Guarantee
Standard providing for financial compensation to customers where requirements set out in the CSG Standard are not met.

CSP—carriage service provider
Person supplying or proposing to supply certain carriage services to a customer, including a commercial entity acquiring telecommunications capacity or services from a carrier for resale to a third party. Under the *Telecommunications Act 1997,* internet and pay TV service providers fall within the definition of carriage service providers.

CTS—Children's Television Standards
Standards designed to provide access for children (aged under 14 years) to quality television programs made specifically for them. The standards regulate timing and scheduling of children's programs and content of adjacent programming.

datacasting
A service that delivers content in the form of text, data, speech, music or other sounds, visual images, or any other form or combinations of forms, where delivery uses the BSB.

data rate
Volume of data able to be transmitted over a given period of time. Data rates are usually measured in bits per second.

data traffic
Volume of data transferred in both directions between a customer and his or her ISP. Data traffic is measured in bytes.

DBCDE—Department of Broadband, Communications and the Digital Economy (now Department of Communications)
Commonwealth department responsible for, among other things, communications policy.

DDA—*Disability Discrimination Act 1992*
Commonwealth legislation that makes discrimination on account of one's disability unlawful.

DEP—Disability Equipment Program
A program for supplying people with disabilities with telecommunications equipment.

dial-up internet service
Service in which subscribers connect to the internet via a modem and dial-up software utilising the PSTN or an ISDN connection.

digital television
The transmission of television (audio and video) via digital signals, serving as a replacement technology for analog services.

digital radio
Method for the digital transmission of radio signals for digital radio reception.

DNCR—Do Not Call Register
Register established by the ACMA that allows individuals to register their home and mobile numbers to opt out of receiving most unsolicited telemarketing calls and faxes, with limited exemptions for public interest organisations.

DSI—domestic systems interference
Interference to the reception of radio or television broadcasting, usually in domestic premises.

DSLAM—digital subscriber line access multiplexer
A network device generally located in a telephone exchange that connects multiple customer DSL interfaces to a high-speed digital channel using multiplexing techniques.

ECP—emergency call person
Nominated organisation responsible for handling emergency calls. For calls made to Triple Zero (the primary emergency call number) and 112 (the international emergency number for GSM and WCDMA mobile phones), the ECP is Telstra. For calls made to the 106 text service (for people who are deaf or have a hearing or speech impairment), the ECP is Australian Communication Exchange (ACE).

EME—electromagnetic energy
Energy in the form of waves having an electric and magnetic component.

ESO—emergency service organisation
Organisation providing an emergency service—police, ambulance or fire service.

fixed-line telephone service
Covers the delivery of voice services over a copper pair-based PSTN access network or fixed-line broadband networks.

FLRN—freephone and local rate number
Telephone numbers commencing with the digits 1800 (freephone) or 13 (local rate).

FM frequency modulation broadcast radio
A mode of radio broadcasting in which the frequency of the transmitted wave is modulated or varied with the amplitude signal. FM radio signals have good immunity to electrical interference and provide consistent quality reception during the day and night. The geographical coverage area varies, but can be up to 100 kilometres for a high-power FM transmitter. Radiofrequencies for FM broadcasts are expressed in megahertz (MHz).

Free TV Australia
Industry body that represents Australia's commercial free-to-air television licensees, and is responsible for developing and reviewing the Commercial Television Industry Code of Practice.

FSA—field service area
One of 44 broad geographic regions in Telstra's fixed telephone network.

FTA TV—free-to-air television
Broadcast television services where the signal is delivered without charge to the viewer.

GB—Gigabytes
One billion bytes. Each byte is eight bits.

Gbit/s—Gigabits per second
Data transfer rate of a billion bits per second. See also **bit/s**.

geographic numbers
Numbers used to provide access to local telephone services and related voicemail and facsimile services. Also known as local numbers.

GHz—Gigahertz
One billion Hertz, where one Hertz is the measurement of frequency equal to one cycle of electromagnetic radiation per second.

GSM—global system for mobile communications
The second generation mobile digital technology originally developed for Europe, but now used globally.

GPS—global positioning services
A satellite-based radio navigation system that provides positioning, navigation and timing information. GPS is available to users on a continuous worldwide basis at no cost. It operates on most places on Earth where there is an unobstructed line of sight to four or more GPS satellites.

HDTV
A digital television broadcasting system with higher resolution than traditional television systems.

HFC cable—hybrid fibre coaxial cable
Transmission links consisting of optical fibre on main routes, supplemented by coaxial cable closer to the end user's premises.

INHOPE—Internet Hotline Providers in Europe Association
International forum for internet hotlines to exchange information and experience. Member hotlines deal with complaints about illegal internet content, particularly child pornography. The ACMA is an INHOPE member.

interception
The interception of telecommunications services for the purpose of law enforcement and national security.

ICT—information and communications technology
Any device or application used for communications.

IP—internet protocol
The routing protocol used in the internet: it operates at the logical network layer and provides for the end-to-end delivery of packets through the internet. The acronym IP is also used to designate data, traffic, services and equipment supported by or used in the internet.

IPND—Integrated Public Number Database
Database of number, name and address information about customers of telecommunications services in Australia, for all carriers and CSPs.

IPTV—internet protocol television
High-end multimedia services such as television, video and graphics delivered over managed IP-based networks that provide an acceptable level of Quality of Service (QoS)/Quality of Experience (QoE), security, interactivity and reliability.

ISP—internet service provider
A CSP offering internet access to the public or another service provider.

KB—kilobyte(s)
A thousand bytes.

kbit/s—kilobits per second
Data transfer rate of 1,000 bits per second. See also **bit/s**.

local numbers
See **geographic numbers**.

low-impact facilities
Communications facilities that are considered to have a low impact on their environment. They include underground cabling, small radiocommunications antennas and dishes, in-building subscriber connections and public payphones. The *Telecommunications Act 1997* provides carriers with immunity from state and territory planning laws for the installation of 'low-impact' facilities.

LTE—Long Term Evolution
A suite of radio and core network specifications that ensures the continuity and future competitiveness of 3G systems. It is associated with 4G system builds providing higher data rates, quality of service, cost reduction in a low complexity all packet switched optimised system.

MB—Megabyte(s)
One million bytes.

Mbit/s—Megabits per second
Data transfer rate of one million bits per second. See also **bit/s**.

MHz—Megahertz
One million Hertz. See also **GHz**.

the minister—Minister for Broadband, Communications and the Digital Economy (now the Minister for Communications)
Minister responsible for the ACMA and its governing legislation, and the legislation that the ACMA administers.

MMS—multimedia messaging service
Mobile telecommunications data transmission service for sending messages with a combination of text, sound, image and video to MMS-capable handsets.

MNP—mobile number portability
Portability for mobile phone numbers. See also **number portability**.

MPS—mobile premium services
Content information and entertainment services delivered to a mobile phone that includes both premium SMS/MMS and mobile portal services.

MVNO—Mobile Virtual Network Operator
A mobile service operator that does not have its own licensed spectrum and does not have the infrastructure to provide mobile service to its customers. Instead, MVNOs lease wireless capacity from pre-existing mobile network owners and establish a brand name different to that of the owner.

National Classification Scheme
A cooperative arrangement between the Commonwealth and the states and territories, under which the Classification Board classifies films (including videos and DVDs), computer games and certain publications.

NBN—National Broadband Network
The national wholesale-only open access data network in Australia offering high-speed broadband to all Australian premises using a combination of fibre-optic cabling and next generation high-speed wireless and satellite technologies. In 2012–13, the NBN was intended to be made available to 93 per cent of homes, schools and

workplaces with optical fibre; the remaining seven per cent of the population were to have access to next generation fixed wireless and satellite technologies.

NCD—nominated carrier declaration
Declaration made by the owner of a telecommunications network unit (facilities or infrastructure for delivery of telecommunications services) nominating a licensed carrier that will be responsible for the specified network unit.

NEDE—new eligible drama expenditure
Expenditure on new Australian or New Zealand television drama programs to meet content requirements that support the local television industry.

non-dial-up subscribers
Subscribers with permanent and 'always-on' connections to the internet using various technologies, including optical fibre, DSL, cable, mobile broadband, fixed wireless and satellite.

NRF—Network Reliability Framework
Requirement on Telstra (since January 2003) to provide regular reports to the ACMA on the reliability of its fixed-line services, and to remediate the network in areas with particularly poor performance.

NRS—National Relay Service
Provides access to the standard telephone service for people with a hearing or speech impairment through the relay of voice, modem or TTY communications. Operates as a translation service between voice and non-voice users of the standard telephone service.

number portability
Arrangements allowing customers to transfer their telecommunications service from one service provider to another without changing their number. Number portability is available for local numbers, freephone and local rate numbers, and mobile numbers.

pay TV
See **subscription television**.

payphone
A public telephone where calls may be paid for with coins, phone cards, credit cards or reverse charge facilities.

portability
See **number portability**.

post-paid
A contract under which a user is charged on a periodic basis, depending on service usage during the previous billing period.

premium-rate services
Content services accessed on numbers with a 190 prefix, where the cost of the call, including access to the content, is included on the customer's telephone bill. Content includes sports results, weather forecasts, astrology services, competition entries, dating contact and telephone sex services. Premium-rate services include SMS as well as voice, fax and data.

prepaid
A contract system by which users pay an amount up-front to purchase a certain amount of usage or credit.

priority assistance
Service for people with a diagnosed life-threatening medical condition entitling them to faster connection and fault repair of their fixed-line telephone service.

PSTN—public switched telecommunications network
Public telecommunications network to provide telephone services to subscribers.

PUSP—primary universal service provider

RCI—radiocommunications interference
Radio emissions that interfere inappropriately with a radiocommunications receiver or service.

RCMG—Register of Controlled Media Groups
The register, maintained by the ACMA, lists the media groups in each licence area, the media operations that form part of a group and the controllers of those operations.

RSP—Retail Service Provider
The retail network service providers and application/content service providers are those that provide services to end users and have a direct customer relationship with the end users. Wholesale service providers do not have this relationship.

RVA—recorded voice announcement
A pre-recorded audio message played to listeners; for example, the message now played to all callers to the Triple Zero (000) emergency service.

SBS—Special Broadcasting Service
Free-to-air national radio and television broadcasting service providing multilingual and multicultural programs that inform, educate and entertain all Australians and, in doing so, reflect Australia's multicultural society. The SBS Online service also provides additional multilingual content through the internet.

STB—set-top box
Most commonly used for televisions, a STB connects and converts a digital television signal to a signal that may be used by a TV set.

SIO—services in operation
The number of services provided by a telephone company at a particular time. The term is used in the context of both fixed-line and mobile services.

smartnumbers
Specified freephone (1800) or local rate (13 or 1300) numbers allocated by auction and considered desirable because they can be translated to a phoneword or they have a memorable pattern.

smartphone
A mobile phone built on a mobile operating system, with more advanced computing capability and connectivity.

SMP—standard marketing plan
Approved plan submitted by the universal service provider of how it will meet the universal service obligation. See also **USO**.

SMS—short message service
A mobile telecommunications data transmission service that allows users to send short text messages to each other using a mobile handset.

spam
Unsolicited commercial electronic messages that are sent by email, SMS, MMS and/or instant messaging.

standard telephone service
The telecommunications service defined as a carriage service providing voice telephony or an equivalent service that meets the requirements of the *Telecommunications (Consumer Protection and Service Standards) Act 1999* and the *Disability Discrimination Act 1992*.

subscribers
ABS subscriber statistics measure the number of 'subscriber lines' rather than the number of 'users.' Counts of subscribers are not the same as counts of people/organisations with internet access. This is because some subscribers may have accounts with more than one ISP or multiple accounts with a single ISP.

subscription television
Service providing access, for a fee, to television channels transmitted using cable, satellite or terrestrial microwave.

take-up
Adoption of a service or product by users.

TB—Terabytes
One thousand gigabytes. Each byte is eight bits.

three-way control
An unacceptable three-way control situation exists in relation to the licence area of a commercial radio broadcasting licence (the *first radio licence area*) if a person is in a position to exercise control of a commercial television broadcasting licence where more than 50 per cent of the licence area population of the first radio licence area is attributable to the licence area of the commercial television broadcasting licence; and a commercial radio broadcasting licence where the licence area of the commercial radio broadcasting licence is, or is the same as, the first radio licence area; and a newspaper that is associated with the first radio licence area.

TIO scheme—Telecommunications Industry Ombudsman scheme
Industry-funded independent dispute resolution service, established in December 1993, for consumers unable to resolve complaints with their telecommunications carrier or CSP (including ISPs).

trigger event
Relates to commercial regional radio licences and includes a transfer of a licence, formation of a new registrable media group that includes a regional commercial radio broadcasting licence, or change of controller of a registrable media group that includes a regional commercial radio broadcasting licence.

TTY—teletypewriter
Telephone typewriter that allows communication to be typed after a call is connected, enabling people with a hearing or speech impairment to use voice telecommunications. Calls can be connected to another TTY user or relayed and translated to voice by the NRS.

ULL—unconditioned local loop
Use of unconditioned copper wire pairs between a customer's local exchange and his or her premises.

URL—uniform resource locator
A unique address for accessing information and services over the internet.

USO—universal service obligation
Obligation under the TCPSS Act to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business.

USP—universal service provider
A nominated provider who receives government subsidies to provide a necessary service. Telstra is the primary USP and is responsible for fulfilling the universal service obligation throughout Australia.

VoIP—voice over internet protocol
The transport of voice traffic inside IP packets over an IP network.

WiMAX—Worldwide Interoperability for Microwave Access
The IEEE 802.16 standards for broadband wireless access networks for multimedia applications with a wireless connection.

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