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Communications
report
2013–14

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Australian
Communications
and Media Authority

Communications report
2013–14

The ACMA *Communications report 2013–14* 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
The information in this document was obtained from sources the ACMA believes to be reliable. However, the ACMA does not guarantee the accuracy, completeness or adequacy of the information. To the maximum extent permitted by law, the ACMA is not liable for any errors, omissions or inadequacy in the information, or for any reliance on the information. Predictions and forward-looking statements in this document are based on information existing and known at the time of publications, and are subject to risks, uncertainties and changes in circumstances beyond the control of the ACMA. Opinions and positions stated in this document are subject to change without notice.

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 research.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.

Australian Government | acma

5 November 2014

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

Dear Minister

ACMA Communications report 2013–14

I am pleased to provide you with the *ACMA Communications report 2013–14*.

This publication incorporates a report on telecommunications performance for 2013–14, prepared in accordance with section 105 of the *Telecommunications Act 1997* (the Act).

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

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

> 105(3)(c) and (d), which relate to carrier and carriage service provider obligations under Part 6 of the Act 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 Act 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 2013–14*, the ninth edition produced since the Australian Communications and Media Authority (the ACMA) was formed in July 2005.

The communications report provides a comprehensive overview of issues relating to the changing communications and media market in Australia, with a particular focus on the consumers' digital life.

While communications connectivity levels are stabilising in both the fixed and mobile markets, Australians' appetite for data and content is ever-increasing. This is evidenced in the communications report by growth in the intensity of online participation, data consumption, e-commerce activities and the streaming of content. In particular, Australians are continuing to increase their consumption of content, with huge growth in the volume of data being downloaded. More Australians are streaming video services directly using cloud-based applications, with volumes streamed now surpassing video content downloaded to devices.

Earlier this year, the ACMA released important research that quantifies the impact of mobile broadband on Australia's productivity and overall economy growth—*The economic impacts of mobile broadband on the Australian economy, from 2006 to 2013*. This research seeks to calculate the economic value to consumers and businesses created from mobile take-up and use, estimating a $33.8 billion increase in economic activity in 2013. This finding echoes the trend of increased data consumption shown in the communications report.

Growth in online activity continues to be a major catalyst for change in the Australian communications and media market, providing both new growth opportunities and challenges for traditional industry revenue streams. Looking ahead, Australian telecommunications companies are showing strong growth in machine-to-machine communications which, as internet-enabled connections grow, is expected to be an area of increasing activity.
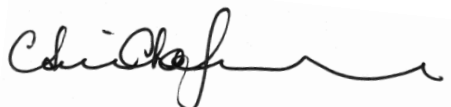
It is also pleasing to note that the telecommunications and broadcasting industries demonstrated during the last year relatively strong levels of compliance with their regulatory obligations.

As part of the government's commitment to reducing the regulatory burden for business and the community, the ACMA has identified areas where it can reduce reporting obligations on industry participants.
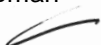
One of these areas is the data collected from industry for producing this report. Earlier this year, the ACMA sought feedback on proposed reductions in the data sought directly from industry to satisfy reporting requirements under section 105 of the *Telecommunications Act 1997 (*the Act). As a result, the ACMA has substantially reduced the amount of data it collects from industry to produce this year's communications report, while nonetheless retaining a full range of information about industry performance.

I commend the ACMA communications report to you as an important evidence base, which provides information and analysis about the rapid change and innovation occurring in Australia's communications and media environment.

The ACMA welcomes feedback on this report.

Chris Chapman
Chairman

Introduction and Executive summary

Introduction

Legislative basis

The *Communications report 2013–14* 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 regulatory remit and role as a converged communications and media regulator.

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The ACMA's research program—research**acma**—underpins its work and decisions as an evidence-informed regulator. It contributes to regulatory policy development, regulatory reviews and investigations, and assists the ACMA in making media and communications work for all Australians.

This research contributes to research**acma**'s five broad areas of interest:

> market developments

> media content and culture

> social and economic participation

> citizen and consumer safeguards

> regulatory best practice and development.

Scope and structure of report

The *Communications report 2013–14* 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 2013–14 reporting period. Part A of this chapter focuses on the supply of services in Australia, including the number of carriers and CSPs and services in operation, and developments relating to the rollout of digital economy infrastructure. Part B looks at consumer engagement with communications, including changing consumer service preferences, current levels of consumer satisfaction with communications services and international comparisons.

> *Chapter 2—National interest issues* presents information about the performance of the emergency call services, an update on the cost of maintaining communications 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, priority assistance and the Network Reliability Framework, the Do Not Call Register (DNCR) and related unwanted communications rules covering telemarketing and spam complaints. This chapter also examines number portability and complaints to the Telecommunications Industry Ombudsman (TIO).

> *Chapter 4—Broadcasting and online content 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.

Executive summary

Key trends

Mobile services are now at saturation levels with 2013–14 seeing the first, albeit small, decline in the number of mobile services in operation to 31.01 million mobile services—a 0.3 per cent decline on the previous year.

There is evidence of a similar slow down occurring in the growth of internet connections, with approximately 81 per cent of Australians (14.7 million) having an internet connection in the home, with growth slowing over the past three years.

Australians are engaging more intensively online, downloading more data and making greater use of mobile handsets. In the six months to May 2014, 68 per cent of internet users accessed the internet via three or more devices. Mobile phones and laptop computers were the most popular devices used by adult Australians to access the internet at May 2014 (76 per cent and 74 per cent, respectively). While use of mobile devices to access the internet has seen significant growth, fixed-line broadband (with subscriptions that generally offer faster download speeds and larger data plans than mobile handset internet subscriptions) nonetheless contributed 93 per cent of total growth in data downloads during the June quarter of 2014.

The total volume of data downloaded in Australia during the June quarter of 2014 was 53 per cent higher than the volume downloaded during the June quarter of 2013—data downloaded via fixed-line broadband increased by 53 per cent and downloads via wireless broadband increased by 20 per cent.

Australians have continued the shift towards over-the-top (OTT) and mobile communications for voice services, while the use of digital media also increased, with 44 per cent of adult Australians (6.4 million) streaming music, movies, TV programs, video clips or radio—a 21 percentage point increase over the past five years. Video and audio content is contributing to the continued growth in the volume of data downloaded.

The availability of higher-speed internet services on both fixed and mobile networks, larger data download plans and growth in the use of cloud content services are contributing factors to increases in streaming and downloading.

From a regulatory perspective, the compliance performance of Australia's communications and media organisations with regulated performance requirements has generally been very strong.

Changing consumer preferences for OTT and mobile voice services

There is continued evidence of a shift in communications preferences to OTT and mobile services. For example, fixed-line telephone services in operation declined by over two per cent to 9.19 million, in line with the trend over recent years. However, users of voice over internet protocol (VoIP) services increased by six per cent to 4.87 million people with the majority of growth in VoIP usage related to OTT services such as Skype.

While mobile service numbers remain steady, Australians are adopting higher bandwidth mobile services to support data downloads. Existing mobile phone handsets are increasingly being replaced with smartphones, with 12.07 million people using a smartphone at May 2014, an increase of eight per cent since 2013. Relatedly, this has led to an increase in mobile phone handset internet subscribers—up by five per cent in the 12 months to June 2014 to reach 20.57 million subscribers.

The strong growth in the take-up of mobile internet services is reflected in recent research undertaken by the Broadband Commission for Digital Development that shows that, out of 138 countries, Australia is ranked fourth in terms of mobile-internet penetration per 100 inhabitants at December 2013 (up from sixth in December 2012).

Communications service and infrastructure developments

The number of industry service suppliers increased during the year by 24 CSPs, with the total number of CSPs now at 1,384. There were 208 telecommunications carriers supplying network infrastructure at the end of June 2014.

The number of CSPs in Australia varies, with a significant number of very small CSPs entering and exiting the telecommunications market each year. Due to this market volatility, industry group Communications Alliance has established a Service Continuity Working Group to consider ways in which the industry, along with government and the TIO, could mitigate consumer detriment when CSPs exit the market.

There has also been an increase in the number of Australian households that have connected to the National Broadband Network (NBN). At June 2014:

> 604,460 premises were passed by the NBN network (234,799 at June 2013)

> 210,628 premises had activated NBN network services (70,100 at June 2013).

Mobile network operators have made significant progress in rolling out 4G mobile networks. At June 2014, network owners reported that:

> Telstra's 4G network covered 87 per cent of the population, up from 66 per cent from the previous year

> Optus expanded its 4G metro population coverage to 78 per cent (on-street) and 58 per cent (in-building), with 1,980 sites upgraded to 4G

> VHA's network (including 3G and 4G) reached 96 per cent of the Australian population, with continued investment to accelerate 4G network rollout, adding, on average, more than 100 new 4G sites per month.

The economic value of internet-related transactions

The economic value derived from the internet continues to increase. Revenue from the sale of goods or services online by businesses operating in Australia reached $246 billion during 2012–13, a $10 billion increase over 2011–12.

Expenditure on online advertising grew by 19 per cent to total $3.99 billion over the 2013 calendar year. This represented a 30 per cent share of total media advertising expenditure, compared to 25 per cent in 2012 and 20 per cent during 2011.

New and emerging content services

The growth in consumer participation in digital activities saw a continued shift to online service delivery models by traditional broadcasters and print media operators. Use of online content services expanded, with 8.22 million Australians accessing professionally produced video content services, such as catch-up TV, video on demand and IPTV in the six months to May 2014, an increase of 4.6 per cent compared to the six months to May 2013.

Telecommunications consumer safeguards

Australia's CSPs demonstrated strong compliance with the regulatory safeguards supporting fixed telephone services. All qualifying CSPs met the Customer Service Guarantee Benchmarks with regard to installing and repairing standard telephone services and meeting appointments for residential and small business customers.

The overall level of service provided to telecommunications customers is reflected in a 12.4 per cent decline in the number of complaints to the industry complaints resolution body, the Telecommunications Industry Ombudsman. In 2013–14 new complaints were down to 138,946.

The DNCR recorded a nine per cent increase in the number of participants, taking the total amount of numbers listed to 9.6 million.

National interest issues

Australia's emergency call network continues to provide Australians with access to the Triple Zero emergency call service. There was a four per cent decrease in number of calls to the emergency service numbers Triple Zero and 112. Telstra again performed above emergency call answering regulatory requirements, in terms of the time taken to answer each call.

Internet security

Growth in the intensity of Australians online engagement is also matched by an increase in their exposure to network security risks. There was an increase in the average number of computer infections reported under the Australian Internet Security Initiative, up from 16,034 per day in 2012–13 to 25,839 per day at May 2014.

Broadcasting industry regulatory performance

All major metropolitan free-to-air commercial network licensees met the Australian content transmission quotas for overall content, drama and documentaries.

All regional commercial radio and television broadcasting licensees broadcast the required amount of material of local significance.

ACMA Hotline for illegal and offensive online content

There was an increase of nearly 550 per cent in the number of items of online child abuse and other illegal material referred to law enforcement agencies.

Key indicators—at a glance

Telecommunications services

Number of services

	Jun-13	Jun-14	% change
Mobile services (voice and data)*	31.09 m	31.01 m	−0.3
Mobile phone handset	19.65 m	20.57 m	+4.7
Mobile wireless broadband (e.g., dongle/datacard)	6.15 m	5.95 m	−3.3
Total mobile internet services†	25.80 m	26.52 m	+2.8
Total internet service subscribers‡	32.0 m	33.05 m	+3.3
Fixed-line telephone services§	9.42 m	9.19 m	−2.4
Mobile phone users without a home fixed-line telephone	3.68 m	4.9 m	+33.2
Home VoIP users‖	4.59 m	4.87 m	+6.1
Mobile phone VoIP users‖	1.06 m	1.50 m	+41.5
	May-13	May-14	% change
Smartphone users‖	11.19 m	12.07 m	+7.9

m=million.

*Change in data source from ACMA annual industry data request to company annual reports.

†Sum of mobile phone handset and mobile wireless broadband subscribers.

‡Including mobile phone handset, mobile wireless broadband, fixed-broadband, satellite, fixed-wireless, other broadband and dial-up subscribers.

§Includes PSTN and other fixed-line telephone services. Due to a methodology change in 2014, data reported here differs from data reported in previous communications reports. In 2014, the total resale (retail services directly connected via another network) and retail services in operation are reported. In previous communications reports, wholesale and retail totals were reported.

‖Estimates relates to people aged 18 years and over.

Note: Counts of subscribers published in previous communications reports may vary due to revisions by the ABS.

Regulated or contracted services

	Jun-13	Jun-14	% change
Payphones (Telstra-operated and privately owned)	29,523	28,068	−4.9
Number of telephone services covered by the CSG Standard	6.68 m	6.54 m	−2.2
CSP customers who have waived their rights under the CSG	0.248 m	0.324 m	+31.0
Number of CSG compensation payments made*	0.175 m	0.143 m	−18.3
Value of CSG compensation payments made*	$7.89 m	$8.08 m	+2.4

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

Communications network and service providers

	Jun-13	Jun-14	% change
Members of the TIO scheme*	1,360	1,384	+1.8
Licensed carriers	201	208	+3.5
Number of ISPs†	77	71	−7.8

*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.
†ISPs with more than 1,000 subscribers operating in Australia as reported by the ABS.

Digital economy

4G mobile networks—Services in operation

	Jun-13	Jun-14	% change
Telstra	2.8 m	5.2 m	+85.7
Optus	1.1 m	2.4 m	+124.2
VHA	n/a	1 m+*	n/a

n/a=not available.
Note: VHA commenced 4G services on 10 July 2013.
*VHA only reported an approximate figure for June 2014.

NBN—Premises activated

	30 June 2013	30 June 2014	% change
Fibre brownfields premises	20,441	105,211	+414.7
Fibre greenfields lots or premises	13,145	45,916	+249.3
Fixed wireless & satellite premises	36,514	59,501	+63.0

Volume of data downloaded

	Quarter ending Jun-13	Quarter ending Jun-14	% change
Fixed-line broadband*	629,964 TB	963,429 TB	+52.9
Wireless broadband†	27,232 TB	32,731 TB	+20.2
Mobile handset internet	19,636 TB	38,734 TB	+97.3
Total volume of data downloaded‡	676,898 TB	1,034,959 TB	+52.9
Average per fixed-line broadband subscriber	107.9 GB	155.0 GB	+43.7
Average per wireless broadband subscriber	4.3 GB	5.4 GB	+25.6
Average per mobile phone handset internet subscriber	1.0 GB	1.9 GB	+90.0

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.
‡Total includes dial up volume.

Professionally produced online content services*

	May-13	May-14	% change
Accessed professionally produced online video content	7.86 m	8.22 m	+4.6
Accessed online news sites	11.39 m	10.79 m	−5.3
Paid for an online news subscription	1.08 m	1.18 m	+9.3

m=million.
*Content accessed in the six months to each date.
Note: Data relates to people aged 18 years and over.

Online participation by Australians

	Jun-13	Jun-14	% change
Have an internet connection at home	14.24 m	14.72 m	+3.4
Have a broadband connection at home	13.15 m	14.64 m	+11.3
Accessed internet via mobile phone during last 6 months*	10.91 m	12.50 m	+14.6
Number of '.au' domain name registrations[†]	2.67 m	2.86 m	+7.1
	2011–12	**2012–13**	**% change**
Value of internet commerce ($A) [‡]	$237 b	$246 b	+3.8

m=million.
b=billion.
*In six months to May 2013 and May 2014.
[†]Excludes domain names registered under .gov.au.
[‡]The 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.
Note: Data relates to people aged 18 years and over.

Broadcasting licences

	30 June 2013	30 June 2014
Commercial radio	273	273
Commercial television	73	69
Subscription television*	2,735[†]	2,735

*Each subscription service is licensed separately.
[†]The figure previously published for subscription television during 2012–13 has been revised by the ACMA.

Number portability and allocations

Local and mobile numbers ported

	Jun-13	Jun-14	% change
Local geographic numbers	763,422	821,760	+7.6
Mobile numbers	1,743,485	1,668,163	−4.3
Freephone and local rate	13,096	11,088	−15.3

National interest matters

Integrated Public Number Database (IPND)

	Jun-13	Jun-14	% change
Number of connected records on the IPND	64.12 m	64.80 m	+1.1

m=million.

Call volumes to emergency call service numbers Triple Zero and 112

	2009–10	2010–11	2011–12	2012–13	2013–14
Total number of calls offered	8,833,683	8,867,191	9,429,595	8,854,728	8,481,470
Total number of calls answered	95.4%	95.8%	96.0%	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 finished.

Disclosures of customer information by carriers and CSPs to support law enforcement and national security agencies

	2012–13	2013–14	% change
Total number of disclosures	685,757	748,079	+9.1

Complipints and investigations

TIO, telemarketing and spam complaints/reports/enquiries

	2012–13	2013–14	% change
TIO new complaints	158,652	138,946	−12.4
Telemarketing complaints and enquiries	30,604	31,797	+3.9
Spam complaints, reports and enquiries	412,725	349,319	−15.4

Source: ACMA and TIO.

Broadcasting and internet content complaints*

	2009–10	2010–11	2011–12	2012–13	2013–14
Broadcasting written enquiries and complaints	1,676	1,512	2,273	2,178[†]	1,593
Internet content complaints received	3,212	4,865	5,026	4,633	4,051

*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.
[†]This does not include 2,680 complaints and enquiries received about 2DAY's Summer 30 program broadcast on 4 December 2012.

Chapter 1
The Australian communications and media market

1.1   Overview

This chapter examines the major developments in the availability and use of communications and media services in Australia. This includes service provider offerings, provision and take-up of services, communications infrastructure developments and consumer satisfaction with communications services.

One overall picture that emerges is that while the number of internet services (both fixed and mobile) has plateaued, there is a continued increase in the intensity of engagement using these services, as measured by data downloaded, number of devices used to go online, and the number of online activities individuals engage in.

This growth in online activity 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.

The cost-benefit analysis of the NBN[1] released in August 2014 provides an important contribution to the discussion in Australia about future broadband demand requirements. The cost-benefit analysis makes use of a detailed bottom up analysis to underpin the forecasts of future broadband speed requirements. The analysis includes consideration of the volume of data required by specific applications. In this report, the ACMA comments on a number of demand indicators for the 2013–14 year including volume of internet downloads, and reports changes in growth on previous years. The report, however, does not forecast future broadband demand.

Key developments in the communications and media environment during 2013–14 included:

> continued growth in the use of smart devices such as smartphones, with a 10 percentage point increase over the 2013–14 reporting period
> increased growth in the number of mobile handset internet services in operation, reaching 20.57 million at June 2014
> increased use of OTT communications such as VoIP via mobile phones and tablets (up 41 per cent and 48 per cent respectively), providing a growing challenge to fixed and mobile voice revenue streams
> the expansion of key infrastructure such as 4G mobile networks and the NBN
> no growth in the number of mobile voice and data services in operation, indicating these elements of the market may have reached saturation
> significant growth (53 per cent) in the volume of data being downloaded in Australia, indicating continued increases in online participation
> strong growth in digital media activities with a growing preference by Australians for streaming online content, increasing to 44 per cent of the population streaming content to June 2014
> reduced dependency on fixed-voice communications with no growth shown over the year, and over a quarter of adults having only a mobile phone and no fixed-line telephone
> continued activity by online goods and service providers to monetise growth in online participation, with increased revenue from online sales and growth in online advertising.

Part A—The industry supply of communications services

1.2   Fixed-line service availability

Number of services in operation

There were 9.19 million retail and resale fixed-line telephone services in operation at June 2014 compared to 9.42 million services at June 2013 (Table 1.1), a net decline of over two per cent. This decline is also reflected in the decline in the number of fixed-line services covered by the Customer Service Guarantee Standard (see Chapter 3 for more details). Telstra accounted for 68 per cent of these fixed-line telephone services at June 2014.

In 2014, Telstra's wholesale services increased by four per cent (50,000 services) to 1.29 million services at June 2014. However, this increase had a minimal impact on total fixed-line services in operation. Telstra experienced a decline of over four per cent in the number of retail fixed-line telephone services in operation during 2013–14 (280,000 services), similar to declines seen during 2012–13 (Table 1.1).

Telstra also reported a 7.5 per cent decline ($325 million) in its fixed-voice product revenue during 2013–14, a slower reduction compared to the 9.5 per cent decline of $459 million during 2012–13.[2]

Table 1.1 Number of fixed-line telephone services in operation

	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	% change 2013–14
Total retail and resale*	10.21 m	9.97 m	9.67 m	9.42 m	9.19 m*	−2.4
Total Telstra (retail only)	7.41 m	7.16 m	6.88 m	6.53 m	6.25 m	−4.3

Note: Due to a methodology change in 2014, data reported here differs from data reported in previous communications reports. In 2014 the total resale (retail services directly connected via another network) and retail services in operation are reported. In previous communications reports, wholesale and retail totals were reported.
Source: 2014 figure is ACCC and ACMA retail and resale data collected from the top six services providers. 2010 to 2013 figures are ACMA retail and resale data collected from these service providers.

The ACMA estimates that 10.09 million[3] retail and wholesale services were operation at June 2014, a decrease of two per cent on the 10.32 million retail and wholesale services reported at June 2013. This estimate is higher than 9.19 million retail and resale figure reported in Table 1.1, reflecting the significant number of carriers and CSPs reselling fixed-line services.

The continued shift from fixed-line telephony

Consumer communications usage continues to change, reflected in the ongoing decline in the number of fixed-line voice services in operation and related revenue.

Growth in mobile phone only consumers

At June 2014, 27 per cent of the total adult population—4.9 million Australians aged 18 years and over—were estimated to be without a fixed-line telephone service in the home, an increase of 33 per cent since June 2013 (Figure 1.1). Figure 1.1 shows a correlation between age and mobile phone only households, with more than half (51 per cent) of those aged 25–34, living in a household without a fixed-line telephone.

Figure 1.1 Growth in population with a mobile phone and no fixed-line telephone

2,038	Jun-10
2,531	Jun-11
3,129	Jun-12
3,682	Jun-13
4,890	Jun-14

Mobile-only by age (Jun-14)

18–24	40
25–34	51
35–44	29
45–54	20
55–64	16
65+	7
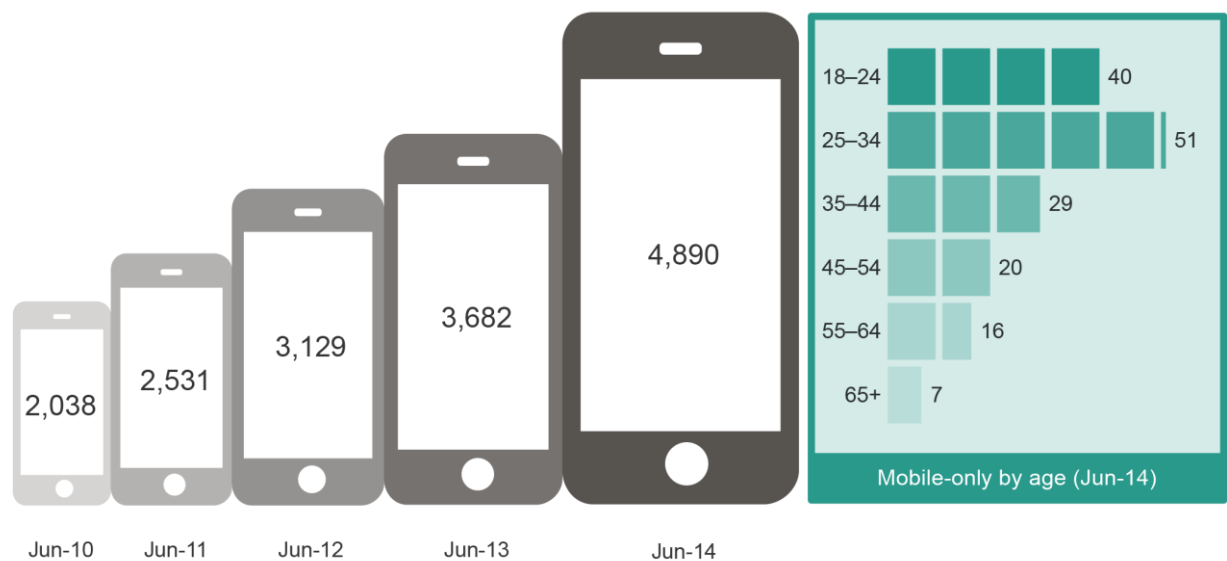
Base: Data relates to people aged 18 years and over ('000s), in the 12 months to June of each year.
Note: Mobile-only data relates to percentage of people in each age group.
Source: Roy Morgan Single Source.

Growth in use of OTT VoIP services

OTT communications—communications accessed via the internet rather than a carrier's or communications service provider's own dedicated, managed network[4]—are increasingly affecting traditional communications revenues, with the impact felt by both mobile and fixed-voice service providers.

In Australia, the number of VoIP users increased by six per cent to reach 4.87 million people aged 18 years and over. The growth in VoIP users has slowed since 2011–12, when annual growth reached 21 per cent (Figure 1.2). However, strong growth continued in the use of mobile phone and tablet OTT VoIP services (increasing by 41 per cent and 48 per cent respectively).

The growth in the use of mobile phones and tablets for VoIP calls is likely a reflection of the rapid take-up of smartphone devices, and the availability of easy-to-use applications (for example, Skype, FaceTime, Viber) that encourage the use of VoIP services on these devices.

Figure 1.2 Household take-up of VoIP services ('000s)
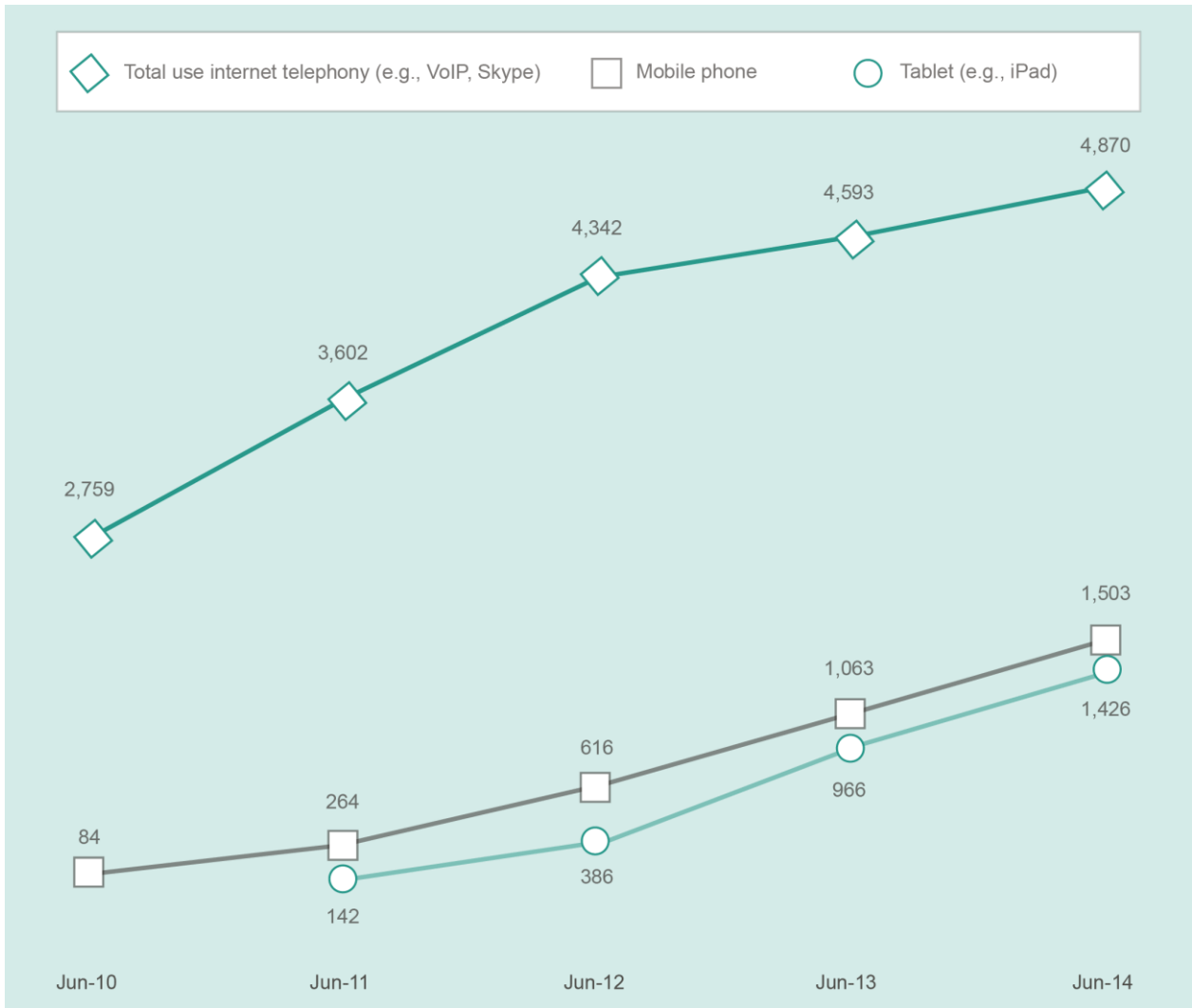
Base: Data relates to people aged 18 years and over ('000s), in the 12 months to June of each year.
Source: Roy Morgan Single Source.

1.3 Mobile service availability

Number of services in operation and market share

At June 2014, there were an estimated 31.01 million mobile voice and data services in operation in Australia. This total figure includes all voice and data services available over 2G, 3G and 4G services including mobile wireless i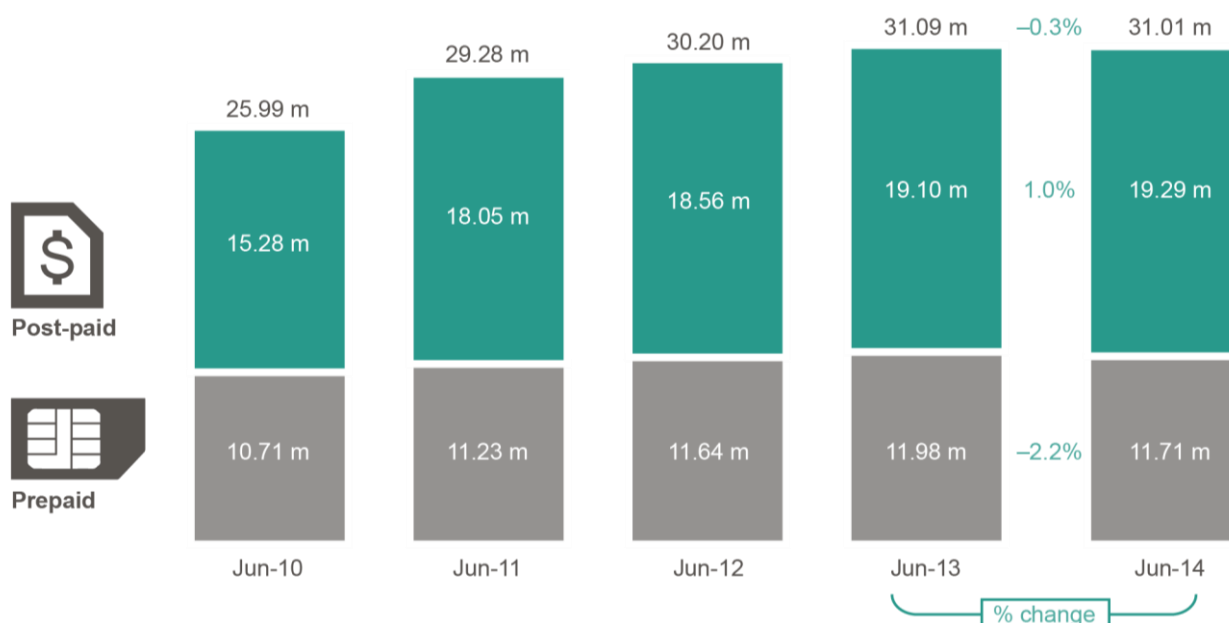nternet services provided via data cards, dongles or USB modems. This is a decrease of less than half a per cent from June 2013 (Figure 1.3), compared with a year-on-year increase of 2.9 per cent from June 2012 to June 2013. This suggests that the Australian market for mobile services is at or near saturation levels.

Figure 1.3 Mobile services in operation

m=million.
Note: Figures include wholesale and retail services and mobile wireless internet services provided via data cards, dongles or USB modems.
Source: Previously, data was sourced from an ACMA annual industry data request. In 2013–14, this data was sourced from company annual reports and press releases.

During 2013–14, 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 market share reaching 52 per cent. In comparison, Optus' market share remained unchanged at 31 per cent while VHA's share declined by three percentage points to reach 17 per cent at June 2014 (Figure 1.4).

Despite a 14 per cent decrease in VHA's customer base from June 2013 to June 2014, VHA has reported its decline in customer numbers has slowed considerably year on year[5] with decreases mainly occurring in the prepaid and wholesale customer base while their post-paid customer base stabilised.[6]

Figure 1.4 Mobile services in operation—carrier share and customer base
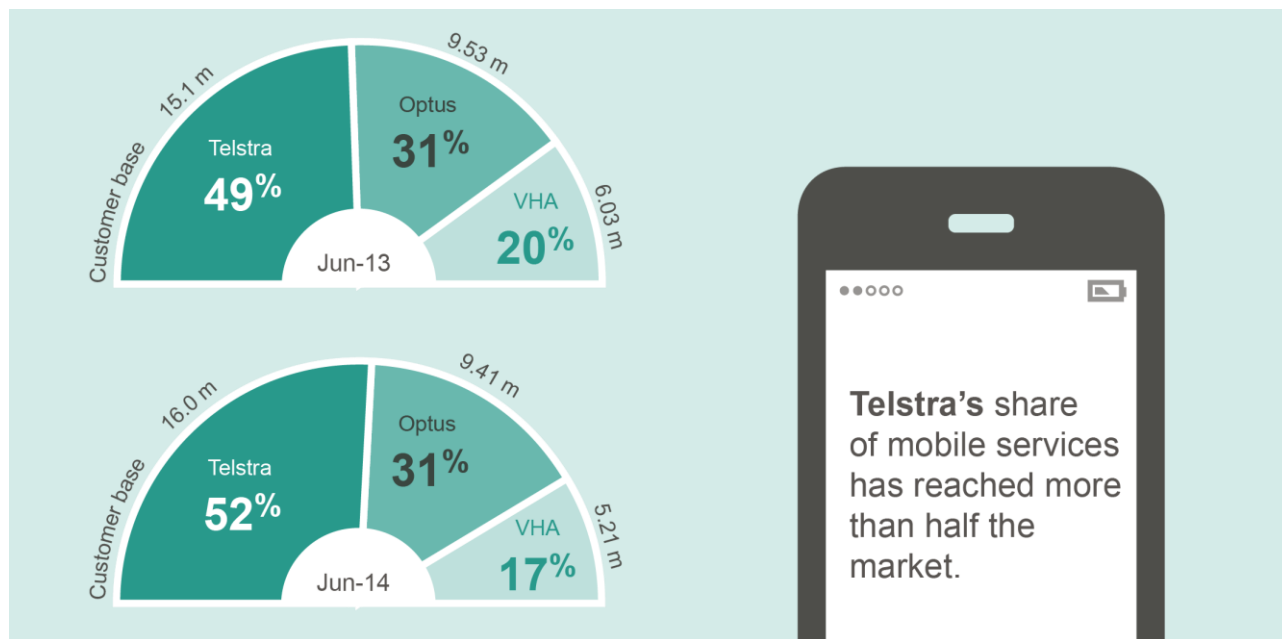
m=million.
Figures include retail services and wireless broadband data services provided via mobile handset, data cards, dongles or USB modems.
Source: Company annual reports and press releases.

All mobile network owners continued to expand their 4G networks increasing coverage. At June 2014, network owners reported that:

> Telstra's 4G network covered 87 per cent of the population, up from 66 per cent from the previous year[7]

> Optus expanded its 4G metro population coverage to 78 per cent (on-street) and 58 per cent (in-building), with 1,980 sites upgraded to 4G[8]

> VHA's network (including 3G and 4G) reached 96 per cent of the Australian population, with further growth expected. VHA has continued to invest in its network, accelerating its 4G network rollout, adding more than 100 new 4G sites per month on average.[9]

The take-up of 4G mobile services has increased significantly over 2013–14:

> Telstra reported an 86 per cent increase in 4G services, with 5.2 million 4G devices on its network at June 2013 compared to 2.8 million at June 2013. The 5.2 million devices comprise 3.8 million handsets, 500,000 tablets, 400,000 dongles and 550,000 Wi-Fi hotspots.[10]

> Optus reported a 124 per cent increase in 4G subscribers, with 2.4 million 4G handsets on their network at June 2014 compared with 1.1 million at June 2013.[11]

> VHA have over 1 million 4G customers.[12]

Telstra announced its 2G (GSM) network is scheduled for closure by the end of 2016.[13]

1.4   Internet service availability

Number of internet subscribers

There were 33.1 million internet subscribers in Australia at June 2014, an increase of three per cent from June 2013 (Table 1.2). This growth has slowed significantly from previous years. The increase reflects continued growth in NBN-related services and mobile-internet services.

Table 1.2 Internet subscribers by technology type

	Jun-12 ('000)	Jun-13 ('000)	Jun-14 ('000)	% change from Jun-13 to Jun-14
Mobile wireless (dongle, data card, USB modem services)	5,862	6,150	5,954	–3
ADSL	4,632	4,787	5,065	+6
Cable	917	934	946	+1
Dial-up	439	227	182	–20
Satellite	94	93	80	–14
Fixed wireless*	30	49	50	+2
Fibre	52	115	203	+70
Other	10	3	2	–33
Total (excluding mobile handset subscribers)	**12,036**	**12,358**	**12,483**	**+1**
Mobile handset	n/a	19,645	20,567	+5
Total (including mobile handsets)	**n/a**	**32,003**	**33,050**	**+3**

*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 2014.

Mobile-internet services

There were 26.52 million mobile-internet service subscribers at June 2014. This is an increase of three per cent over the year. There are two types of mobile-internet services reported here:

> mobile handset—such as smartphones

> mobile wireless—using dongles, datacards or USB modems.

Mobile-internet subscribers account for 86 per cent of all mobile services in operation at June 2014.[14] The proportion of mobile-internet services increased three per cent over the year as mobile consumers replace their old voice-only handsets with smartphones.

Given the total number of mobile services (including those with and without internet capability) in Australia slightly declined for the period 2013–14, the increase in mobile handset internet subscribers suggests that growth in mobile-internet services is a result of consumers upgrading their mobile phone with an internet-enabled device and not a growth in the overall mobile services market. The latest data from the Australian Bureau of Statistics (ABS) shows that mobile handset subscribers increased five per cent in the year at June 2014, to reach 20.57 million subscribers and mobile wireless internet subscribers decreased three per cent to reach 5.95 million subscribers (Figure 1.5).

Figure 1.5 Mobile-internet subscribers in Australia (000s)
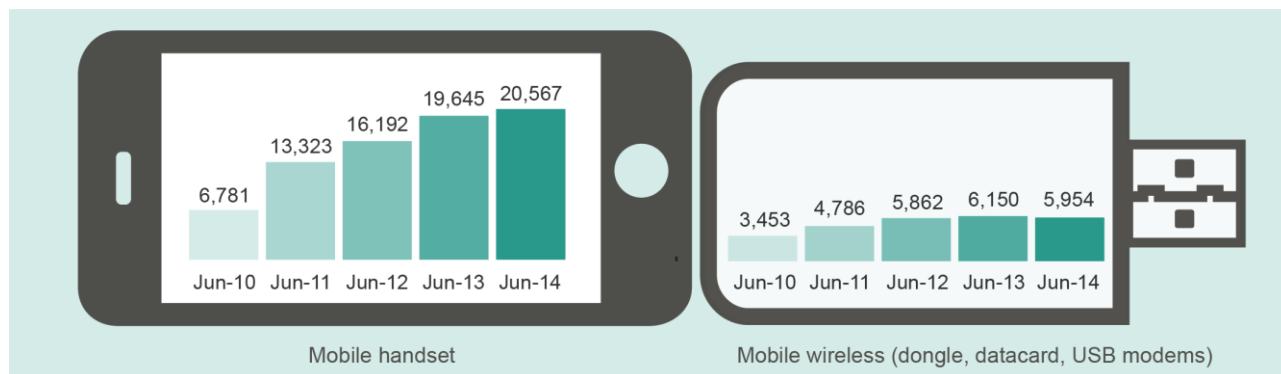
Base: Number of subscribers.
Note: The ABS has revised some mobile handset internet subscriber figures published in previous ACMA reports.
Source: ABS, 8153.0-Internet activity, Australia, June 2014.

ACMA research supports this picture of growth, with the number of adult Australians accessing the internet via their mobile phone handsets in the six months to May 2014 reaching 70 per cent. This is an eight percentage point increase from 62 per cent during the six months to May 2013.

The availability and adoption of smartphones has facilitated growth in the use of the internet via mobile phone handsets. At May 2014, 12.07 million Australian adults (74 per cent) were estimated to be using a smartphone at May 2014 compared to 11.19 million (64 per cent) at May 2013 (Figure 1.6). The proportion of adults using any mobile phone has remained the same at 94 per cent, which may, again, indicate that mobile phone penetration has reached saturation levels as more consumers replace their mobile phones with smartphones.

Figure 1.6 Take-up of internet-enabled mobile phones
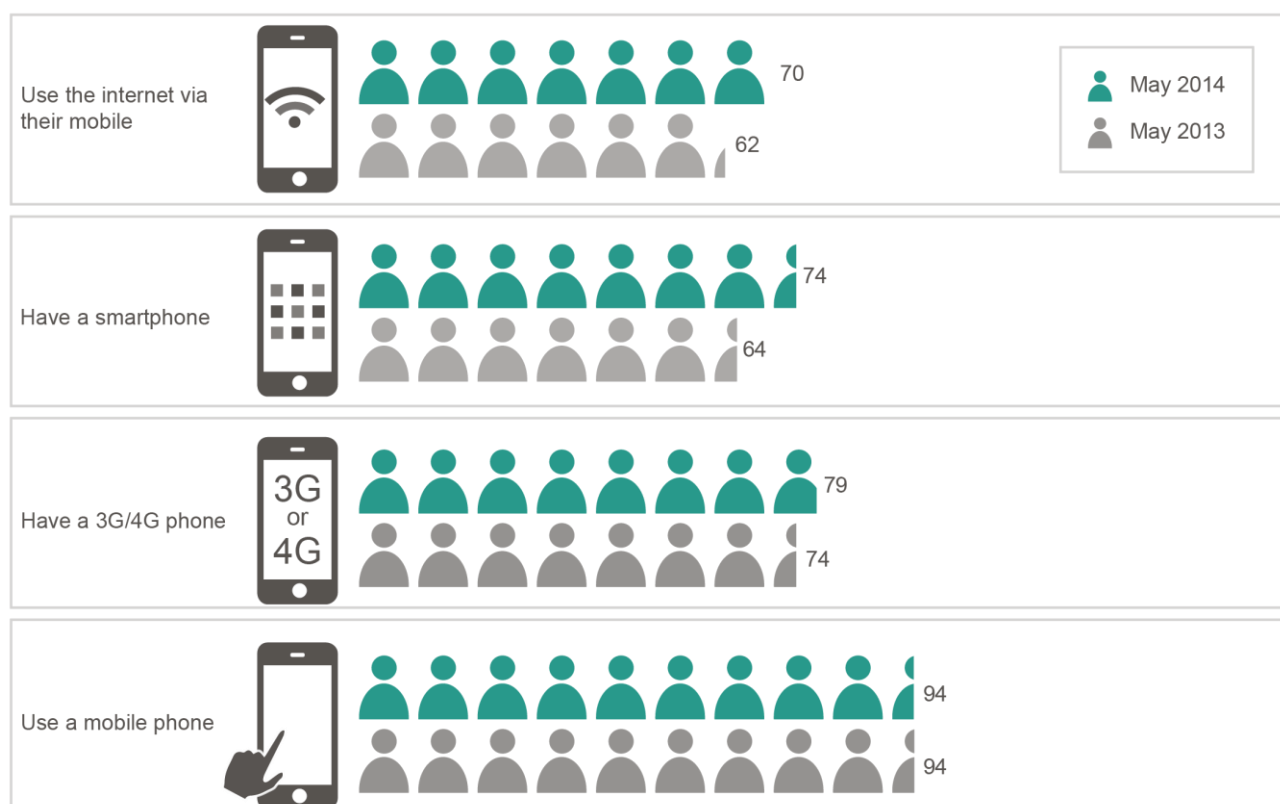
Base: Percentage of people with a fixed-line telephone and/or a mobile telephone.
Note: Data is at May 2013 and May 2014 with the exception of mobile phone internet use that relates to use in the six months to May in 2013 and 2014. A smartphone is a mobile phone built on a mobile operating system, with 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.

Number of internet service providers

At June 2014, there were 71 internet service providers (ISPs) with more than 1,000 subscribers operating in Australia, compared to 77 at June 2013. The distribution of ISPs by number of internet subscribers was:

> 45 with 1,001–10,000 subscribers, down from 48 at June 2013

> 18 with 10,001–100,000 subscribers, down from 19 at June 2013

> eight with 100,001 or more subscribers, down from nine at June 2013.[15]

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

Table 1.3 SIOs for key Australian ISPs

ISPs	Internet SIO	2013 ('000)	2014 ('000)	% change
Telstra	Fixed-broadband retail	2,772	2,955	+7
	Fixed-broadband wholesale	769	789	+3
	ISDN access (basic line equivalents)	1,285	1,225	−5
	Total fixed internet subscribers	**4,826**	**4,969**	**+3**
	Mobile broadband (data card)	3,570	3,679	+3
Optus	On-net broadband customers*	986	982	−0.4
	Off-net	13	9	−31
	Dial-up	12	10	−17
	Total fixed internet subscribers	**1,011**	**1,002**	**−1**
iiNet	On-net[†]	544	619	14
	Off-net	271	266	−2
	NBN + Fibre[†]	25	65	+160
	Total fixed internet subscribers	**840**	**950**	**+13**
	Mobile	126	156	+24
TPG	On-net bundle	351	471	+34
	On-net standalone	236	205	−13
	Off-net	84	72	−14
	Total broadband subscribers	**671**	**748**	**+11**
M2 Group	Consumer subscribers	350	414	+18
	Business subscribers	38	43	+13
	Wholesale	25	25	0
	Total fixed-broadband subscribers	**412**	**482**	**+17**

*Optus on-net includes HFC, ULL and business-grade broadband customers.

[†]iiNet data for 2013 differs from that reported in Communications report 2012–13 due to changes reported in iiNet's 2014 report.[16]

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 and press releases.

National Broadband Network (NBN)

The NBN is a wholesale network built and operated by NBN Co that delivers high-speed broadband across Australia via a multi-technology mix. The NBN is an Australia-wide project to upgrade the existing fixed-line telephone and internet network infrastructure.

Table 1.4 provides an overview of premises passed or covered by the NBN and the number of premises with NBN services. In relation to premises passed or covered by the NBN at June 2014, NBN Co reported that:

> 381,146 brownfield premises were passed by the NBN fibre network, an increase of 133 per cent since June 2013

> 111,116 greenfield lots or premises were passed by the NBN fibre network, up by 152 per cent since June 2013

> 112,208 premises were passed by the fixed wireless network, an increase of 312 per cent since June 2013.

At June 2013, 210,628 premises had activated an NBN service, an increase of 200 per cent since June 2012. This includes 151,127 premises connected to the fibre network and 59,501 premises connected to fixed wireless or satellite services.

Table 1.4 Total premises/lots passed/covered and premises activated—NBN services

		at 30 Jun-13	at 30 Jun-14	% change
Premises passed/covered	Fibre brownfields premises	163,515	381,146	+133
	Fibre greenfields lots or premises	44,028	111,116	+152
	Fixed wireless premises	27,256	112,208	+312
	Total	**234,799**	**604,470**	**+157**
Premises activated	Fibre brownfields premises	20,441	105,211	+415
	Fibre greenfields lots or premises	13,145	45,916	+249
	Fixed wireless & satellite premises	36,514	59,501	+63
	Total	**70,100**	**210,628**	**+200**

Note: Premises passed refers to homes and businesses passed by the active network, including premises activated and those that can't yet access a service—i.e., Service Class Zero (SC0). SC0 refers to premises passed by the active network, but for which a service cannot currently be ordered from a telephone or internet service provider because additional work is required, for example because there is cabling required for an apartment block. Premises covered refers to fixed wireless areas where no physical infrastructure passes the premises, but residents and businesses have fixed wireless coverage and can access a service via their preferred retail service provider. Lots/premises passed/covered is the combined total for fixed-line technology in brownfields and greenfields (new developments) plus fixed wireless premises that are covered by the network, excluding satellite but including SC0. Premises activated refers to homes and business that have an active service installed.
Source: NBN Co, ‘NBN Co Weekly Progress Report’, 14 August 2014.

Switch-off

From 23 May 2014, the NBN began replacing most existing fixed-line telephone links, ADSL internet and Telstra cable internet services in the first 15 Fibre Serving Area Modules (FSAMs). The existing fixed-line telecommunications network is being disconnected in areas within Armidale, Kiama, Willunga, Townsville, Brunswick, South Morang, Deloraine, George Town, Kingston, Triabunna, St Helens and Sorrell. Services affected include fixed-line telephones, ADSL and Telstra cable internet services, monitored/non-monitored medical alarms/pendants, monitored/non-monitored security alarms, fire alarms (excludes smoke detectors), elevator phones, EFTPOS and ATM machines, teletypewriters (machines for the hearing impaired) and fax machines.[17]

Key mergers and acquisitions

There were a number of mergers and acquisitions of companies and assets that occurred over the 2013–14 period. These mergers and acquisitions were strategic in positioning some of Australia's largest communication providers to take advantage of fibre rollout and the increasing demand for data and data applications such as cloud services by consumers and businesses (Table 1.5).

Table 1.5 Key mergers and acquisitions

Purchaser	Target	Date	Value	Commentary
iiNet	Adam Internet	August 2013	$60 m	Increased broadband subscriber base including a range of business and government clients using data centres, hosting and cloud services.
Telstra	North Shore Communication (NSC)	August 2013	$100 m	Both acquisitions strengthened Telstra's Network Application and Services Portfolio, providing enterprise and business customers managed network, security, cloud and communications services.
	O2 Networks	January 2014	$60 m	
TPG Telecom	AAPT (Telecom New Zealand Australian Subsidiary)	December 2013	$450 m	Acquisition of infrastructure assets including an 11,000 km fibre-optic network connected a number of capital cities and fibre access to 1,500 buildings.

Source: Company annual reports and press releases.

M2M

Machine-to-machine (M2M) communications encompasses a number of areas where devices are communicating with each other without human involvement. Examples of M2M services include environmental sensors, metering of utilities and even smartphones that run applications in the background to synchronise data and provide other services. M2M communications are considered to be a key enabler of applications and services across a broad range of markets including healthcare, logistics, transport and utilities.[18]

Strong growth is expected in the adoption of M2M services in Australia in the coming years. Telstra, Optus and Vodafone are among an increasing number of M2M service providers in Australia. Telstra has reported 12 per cent growth in M2M revenue (to $101 million) in the 12 months to June 2014. During this period, Telstra also added 291,000 M2M services.[19]

1.5   Carrier licensing and CSPs

In the year to 30 June 2014, the total number of members of the TIO scheme continued to increase, reaching 1,384 (a 1.8 per cent increase).[20] While CSPs do not need to be licensed or registered, TIO scheme membership is mandatory for all eligible CSP parties that provide or resell telecommunications services to consumers and small businesses.

There were 208 licensed carriers in Australia with the ACMA granting 22 carrier licences over 2013–14. In the same period, 13 carriers surrendered their licences and two licensed carriers were deregistered by the Australian Securities and Investments Commission.

A significant number of very small CSPs enter and exit the telecommunications market each year. Due to this market volatility, industry group Communications Alliance has established a Service Continuity Working Group to consider ways in which the industry, along with government and the TIO, could mitigate consumer detriment when CSPs exit the market. The work of this group is ongoing.

At June 2014, there were 74 nominated carrier declarations (NCDs) in force. In 2013–14, the ACMA granted five NCDs and revoked two NCDs. During the same period, the ACMA issued one trial certificate compared with two in the previous period.[21]

Figure 1.7 Trends in carrier licensing and nominated carrier declarations
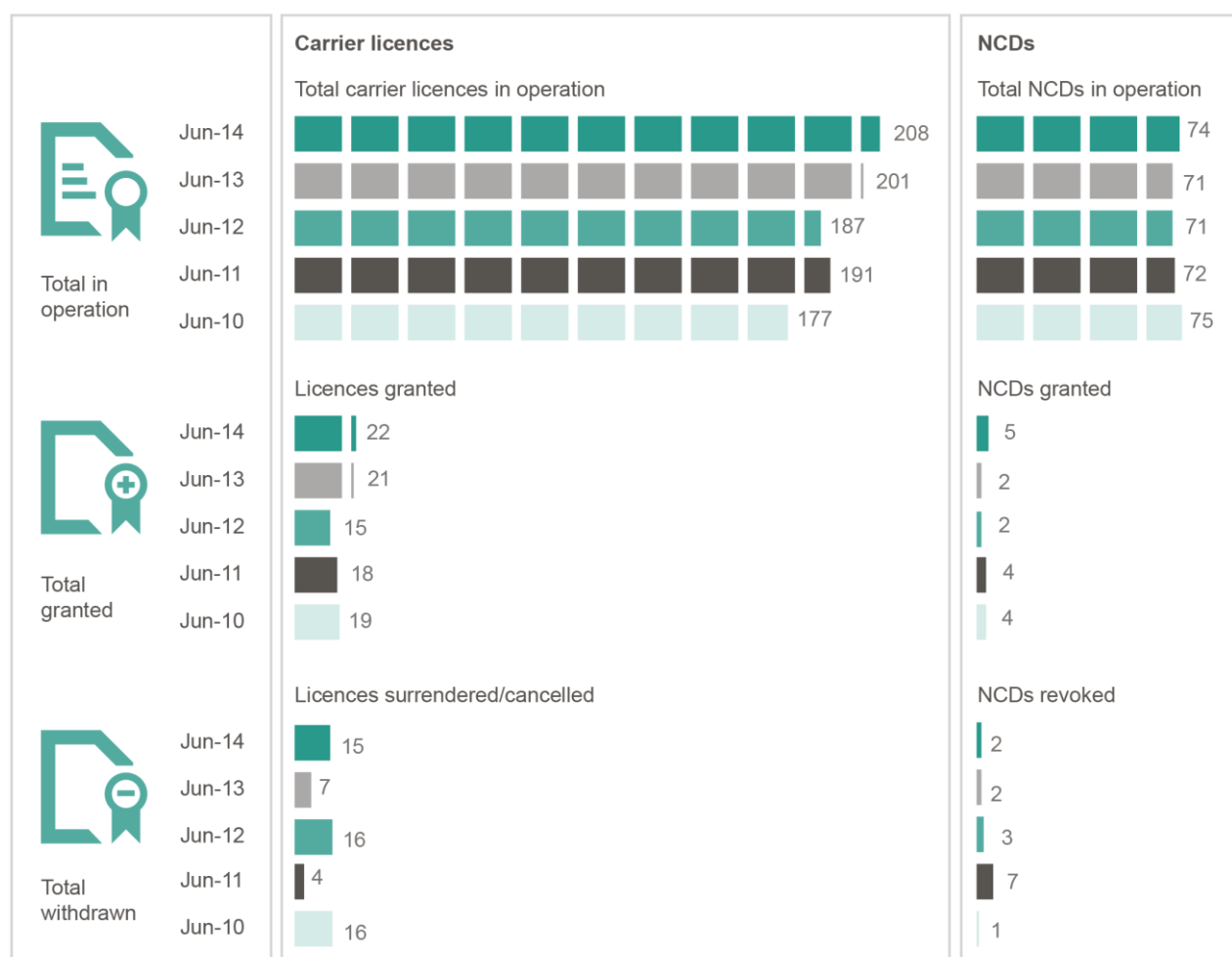
Source: ACMA licensing figures.

# 1.6   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 2013–14, the ACMA sold 3,891 numbers through the smartnumbers auction allocation system and raised approximately $1.53 million in revenue. This quantity of numbers was 13 per cent fewer than the 4,479 numbers sold in 2012–13 for $1.68 million in revenue.

Geographic numbers

In 2013–14, CSPs were allocated 1.45 million geographic numbers—down 18 per cent on allocations in 2012–13 (Figure 1.8).

CSPs surrendered 90,000 geographic numbers during 2013–14 compared with 419,100 for 2012–13. During 2013–14, 3.3 million geographic numbers were transferred, which was mainly related to further consolidation in the CSP market.

Figure 1.8 Trends in geographic numbers allocated
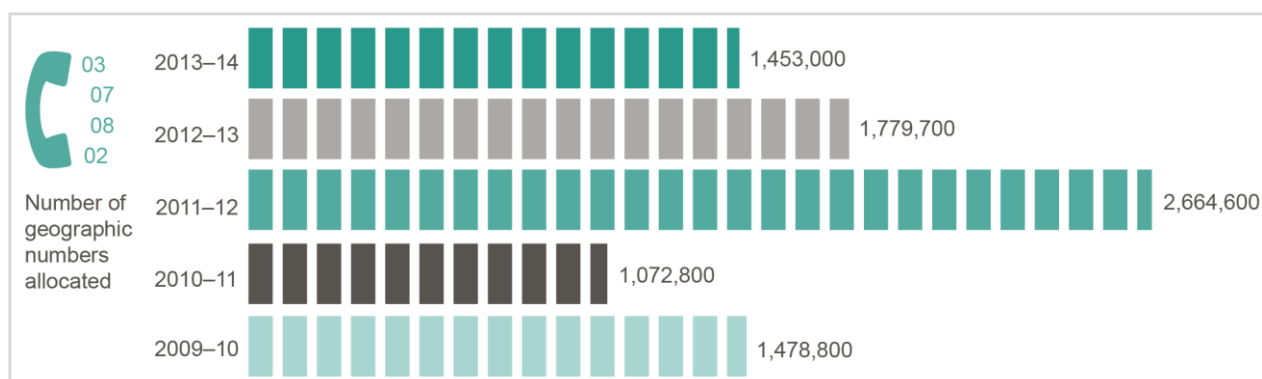
Source: ACMA.

Digital mobile numbers

During 2013–14, CSPs were allocated 2.6 million digital mobile numbers, down from 2.91 million during 2012–13. At 30 June 2014, 68 per cent of available mobile numbers had been allocated.

Other numbers

During 2013–14, there was limited demand from CSPs for number types other than geographic and digital mobile services. Three mobile network codes and one international signalling point code were issued to network operators. Almost all data network service numbers in use have now been surrendered, with the remaining allocation likely to be surrendered during 2014–15.
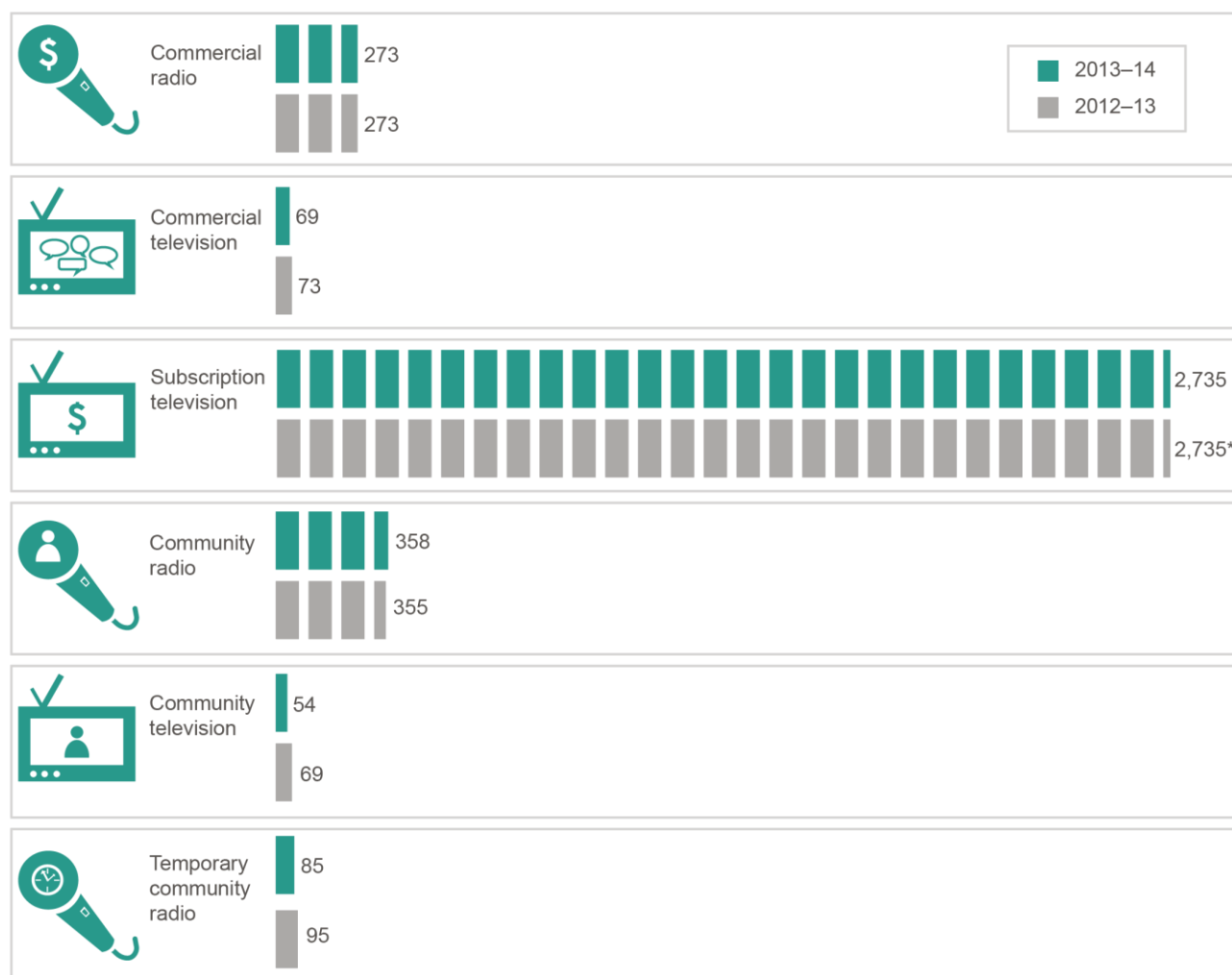
1.7   Broadcasting services

Number of broadcasters by segment (radio/TV/commercial)

The number of broadcasting licences in operation for television and radio saw minimal changes compared to the 2012–13 reporting period. At June 2014, the number of active licences in Australia were (Figure 1.9):

> 342 commercial broadcasting (radio and television) licences, down by four licences

> 2,735 subscription television licences, unchanged from last year

> 497 community radio and television licences (including temporary licences), down by 22 licences.

Figure 1.9 Number of broadcasting licences in operation in Australia

The figure previously published for subscription television during 2012–13 has been revised by the ACMA.
Source: ACMA.

1.8   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 licensed to operate within specified geographic areas and are subject to regulations to limit concentration of their ownership and control.

Ownership and control of commercial television services

During 2013–14, there were a number of control changes in the media. Some involved the transfer of licences to different media networks or groups while others were a result of financial or company restructures.

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.[22]

Table 1.6 summarises ownership and control of commercial television services in Australia.

The key changes that occurred during 2013–14 include:

> On 1 July 2013, Nine Entertainment Co Holdings Ltd acquired a commercial television licence in Adelaide from WIN Corporation Pty Ltd.

> On 30 September 2013, Nine Entertainment Co Holdings Ltd acquired a commercial television licence in Perth from WIN Corporation Pty Ltd.

> On 11 December 2013, there was an initial public offering (IPO) of shares in Nine Entertainment Holdings Ltd. As a result of the issue of new shares as part of the IPO, the shareholding of Oaktree Capital Group, LLC and its associated entities was diluted to below 15 per cent and these companies ceased to be in control of the commercial television licences held by the Nine Network.

> On 26 March 2014, James Packer and Lachlan Murdoch unwound their agreement to act together in respect of their shareholding in Ten Network Holdings Ltd. As a result, both Lachlan Murdoch and James Packer and their associated entities ceased to be in control of Network Ten's commercial television licences.

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

Table 1.6 Ownership and control of commercial television services (major networks)

Network	Licence type	Number	Ownership and control—licence areas
Seven Group Holdings Ltd	Metropolitan	5	Sydney, Melbourne, Brisbane, Adelaide and Perth
	Regional	1	Regional Queensland
Nine Entertainment Co Holdings Ltd	Metropolitan	5	Sydney, Melbourne, Brisbane, Adelaide and Perth
	Regional	3	Darwin (one sole operation and one joint venture with Southern Cross Media Group Ltd) and northern New South Wales
Ten Network Holdings Ltd	Metropolitan	5	Sydney, Melbourne, Brisbane, Adelaide and Perth
WIN Corporation Pty Ltd	Regional	21	Across regional Australia, including joint ventures in: > Tasmania with Southern Cross Media Group Ltd > Mildura, Geraldton, Kalgoorlie, Western Zone, South West and Great Southern television licence areas with Prime Media Group Also includes three licences in each of Griffith, Riverland and Mount Gambier South-East licence areas
Southern Cross Media Group Ltd	Regional	19	Across regional Australia, including joint ventures in: > Darwin with Nine Entertainment Co Holdings Ltd > Tasmania with WIN Corporation Pty Ltd > Mt Isa and the remote central and Eastern Australia licence areas with Imparja Television Pty Ltd Also includes three licences in each of the Broken Hill and Spencer Gulf licence areas
Prime Media Group Ltd	Regional	13	Across regional Australia including joint ventures in: Mildura, Geraldton, Kalgoorlie, Western Zone, South-West and Great Southern licence areas with WIN Corporation Pty Ltd

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: ACMA Register of Controlled Media Groups and the Media Control Database at
www.acma.gov.au/Industry/Broadcast/Media-ownership-and-control/Registers/media-control-database.

Ownership and control of commercial radio services

Table 1.7 shows that ownership and control of commercial radio services is similar to 2012–13:

> Southern Cross Media Group Limited, Australian Radio Network Pty Ltd, Illyria Radio Investments Ltd (Nova) and Fairfax Media Limited continue to 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.

> Nine different networks control more than five commercial radio broadcasting licences, down from 11 different networks in 2012–13.

> These nine networks together control 220 licences out of a total of 261 commercial radio licences that are subject to the media diversity and control rules under Part 5 of the BSA. This does not include commercial radio broadcasting licences allocated under subsection 40(1) of the BSA. The remaining 41 licences are held by 19 networks/owners, each with five or fewer licences.

The key changes that occurred in 2013–14:

> On 12 August 2013, Grant Broadcasters Pty Ltd acquired 10 commercial radio licences in regional Queensland from Prime Media Group Ltd.

> On 19 February 2014, APN News and Media Ltd (which was a joint venture owner of the Australian Radio Network (ARN) with the US-based Clear Channel Broadcasting Inc.) acquired Clear Channel's interest in ARN, giving it full ownership of ARN.

> On 27 February 2014, the late Paul Ramsay, Paul Ramsay Holdings Pty Ltd and Paul Ramsay Foundation Pty Ltd, sold their interests in Prime Media Group Ltd to a broad spread of institutional investors.

Table 1.7 Ownership and control of commercial radio services

Network group company	Total licences controlled	Ownership and control—licences and operations
ACE Radio Broadcasters Pty Ltd	13	All licences in regional Victoria and one licence in the regional New South Wales licence area of Albury, which includes parts of regional Victoria
Australian Radio Network Pty Ltd	12	Metropolitan licences in Adelaide (2), Brisbane (2), Melbourne (2), Sydney (1) and Western Suburbs Sydney (1) One regional radio licence in Katoomba, News South Wales Two joint-venture licences with DMG Radio, one in each of Brisbane and Perth, and two joint-venture licences with Southern Cross Media Group Ltd in Canberra
Illyria Radio Investments Ltd (Nova)	10	Metropolitan licences in Adelaide (2), Brisbane (1), Melbourne (2) and Sydney (2) as well as one regional radio licence in Gosford, New South Wales Two joint-venture licences with Australian Radio Network Pty Ltd, one in each of Brisbane and Perth
Fairfax Media Ltd	7	Metropolitan licences in Brisbane (2), Melbourne (2), Perth (2) and Sydney (1)
Grant Broadcasters Pty Ltd	52	A metropolitan licence in Perth Licences in regional areas in New South Wales, Northern Territory, Queensland, Victoria, Western Australia and Tasmania
Macquarie Radio Network Ltd	8	Two metropolitan licences in Sydney Six licences in regional areas in Queensland
Redwave Media Ltd/ Seven Group Holdings Ltd	9	Licences in regional areas in Western Australia
Southern Cross Media Group Ltd	78	Two metropolitan licences in each of Adelaide, Brisbane, Melbourne, Perth and Sydney Licences in regional areas in New South Wales, Queensland, Tasmania, Victoria and Western Australia
Broadcast Operations Pty Ltd (Super Radio Network)	36	Licences in regional areas of New South Wales and Queensland. One metropolitan licence in Sydney

Note: Table only includes networks with more than five licences.
Source: ACMA Register of Controlled Media Groups and the Media Control Database at
http://www.acma.gov.au/Industry/Broadcast/Media-ownership-and-control/Registers/media-control-database.

Cross-media ownership

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

> 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 a newspaper in Perth.

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

> Lachlan Murdoch, through his position at News Corporation and interests in Illyria Radio Investments Ltd radio licences, controls two radio licences and an associated newspaper in each of the Sydney, Brisbane, Adelaide and Melbourne metropolitan licence areas. Lachlan Murdoch became a Non-Executive Chairman of News Corporation on 26 March 2014 and, as a result, became a controller of the 10 associated newspapers owned by News Corporation.

Subscription television in Australia

In 2013–14, no new subscription television broadcasting licences were allocated by the ACMA.

Community radio and broadcasting licences

At 30 June 2014, there were 358 long-term community radio broadcasting licences, representing a range of community interests (Table 1.8). Fifty per cent of community radio broadcasting services represent the general community in the licence area where they broadcast.

During 2013–14, the ACMA:

> renewed 36 community radio broadcasting licences

> allocated six community radio broadcasting licences

> decided not to allocate two community radio broadcasting licences.

Consideration of a further two applications for community radio broadcasting licences was ongoing at the end of the reporting period.

Table 1.8 Community radio broadcasting services by community interest, June 2014

Community interest	Number	% of total
Aboriginal and Torres Strait Islander	94	26
Educational/special interest	22	6
Ethnic	6	2
General geographic area	178	50
Music	8	2
Religious	34	10
Senior citizen	8	2
Youth	8	2
Total	**358**	**100**

Source: 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 85 temporary licences at 30 June 2014.

Community television services

There were 54 long-term community television broadcasting licensees at 30 June 2014, of which three were in the metropolitan areas of Brisbane, Melbourne and Sydney. The remaining 51 were remote Indigenous broadcasting services. Three remote Indigenous community television broadcasting services lapsed because the licensees did not submit an application for renewal of the licence. Twelve remote Indigenous community television broadcasting licences were surrendered to the ACMA during 2013–14.

The ACMA renewed the three metropolitan community television broadcasting licences during 2013–14.

Community television trials

During 2013–14, the ACMA decided to extend community television trials in Adelaide and Perth for a further 12-month period from 1 January 2014 to 31 December 2014.

Part B: Consumer engagement with communications

1.9   Digital engagement

Digital engagement is more than being connected to the internet—it encompasses participation and engagement in online activities and the changing behaviours in the way Australian internet users undertake traditional day-to-day activities in an online environment.

Connectivity—take-up of the internet

Internet access is available to Australians via a range of networks, devices and locations. During June 2014, an estimated 14.58 million Australians aged 18 years and over went online compared to 13.78 million during June 2013.[23]

The proportion of adult Australians with access to the internet is stabilising with data from industry and consumers showing a slowdown in internet take-up. Digital engagement is now shifting towards increased online participation rather than simply increased internet connectivity. In proportional terms:

> approximately 81 per cent of Australians (14.7 million) have an internet connection in the home—growth has been very slow for the last three years
> 81 per cent (14.6 million) of Australians had a home broadband connection—with dial-up making up fewer than one per cent of internet connections (Figure 1.10)
> the number of people accessing the internet via a mobile phone continues to increase—from a 10 percentage point increase in the 12 months to May 2013 compared to an eight percentage point increase in the 12 months to May 2014
> the number of people accessing the internet via a tablet grew 25 per cent in the six months to June 2014 to reach 5.5 million adult Australians.[24]

Figure 1.10 Change in access to the internet

Home internet connection*

Jun-14	81
Jun-13	80
Jun-12	80
Jun-11	79
Jun-10	77

Home broadband connection

Jun-14	81
Jun-13	74
Jun-12	70
Jun-11	69
Jun-10	66

Used the internet via a mobile phone†

May-14	70
May-13	62
May-12	51
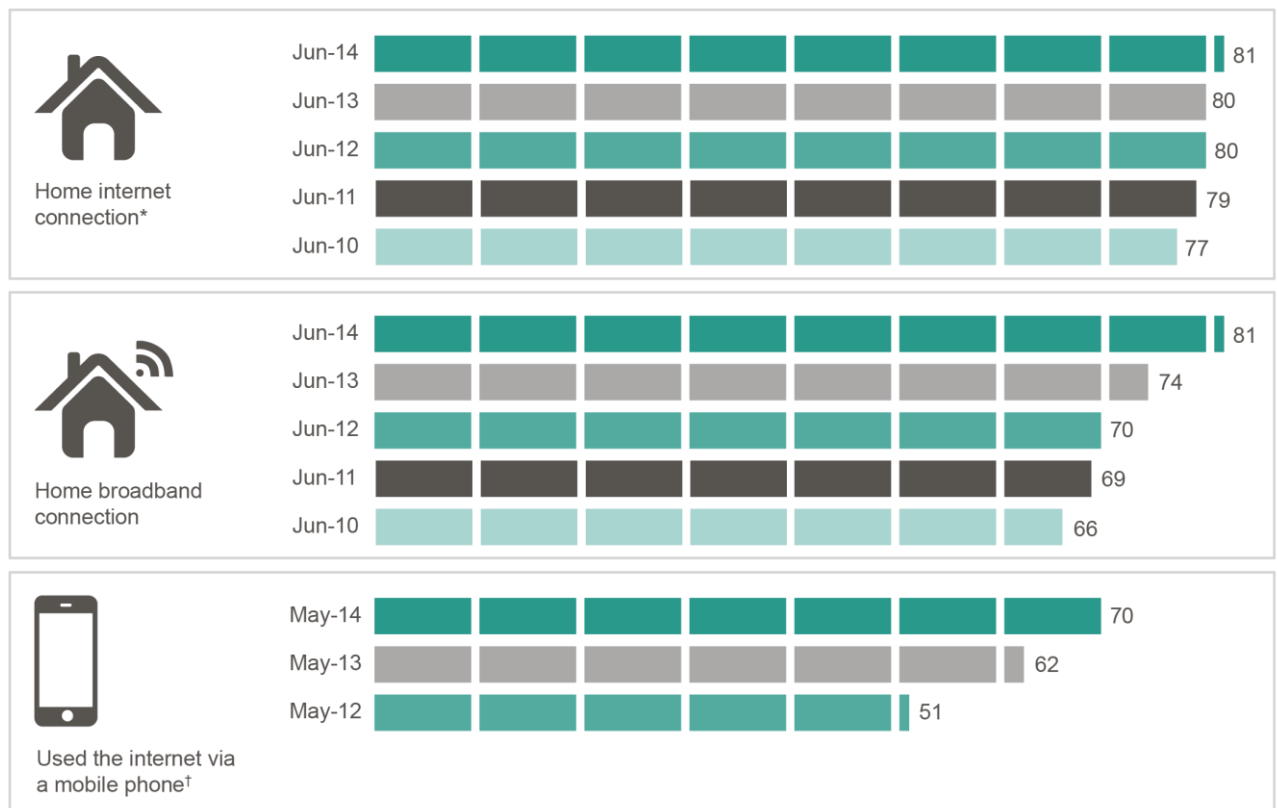
*Includes ADSL, cable, fibre, satellite, fixed wireless, mobile wireless internet services—using dongles, datacards or USB modems. It excludes mobile handset internet.
†Relates to use of the internet via a mobile phone handset in the six months to May. Data not available prior to May 2012.
Base: Percentage of people aged 18 years and over.
Source: Roy Morgan Single Source (Home internet connection and Home broadband connection), in the 12 months to June of each year and ACMA-commissioned survey (used the internet via a mobile phone).

Volume of data downloaded increases

While the take-up of mobile and internet services is slowing down and potentially reaching levels of saturation, the amount of data Australians consume via these services is increasing significantly.

The total volume of data downloaded in Australia during the June quarter of 2014 was 53 per cent higher than the volume downloaded during the June quarter of 2013 (Figure 1.11). While use of mobile devices has seen significant growth, fixed-line broadband users—with subscriptions that generally offer faster download speeds and larger data plans than mobile handset internet subscriptions—contributed 93 per cent of total growth in data downloads during the June quarter of 2014. During this period, the volume of data downloaded over:

> wireless broadband increased by 20 per cent

> mobile handsets increased by 97 per cent

> fixed-line broadband increased by 53 per cent

> dial-up decreased by two per cent.

Figure 1.11 Volume of data downloaded by Australian internet users in the quarter to June (terabytes)

Total volume of data downloaded
- Jun-14: 1,034,959
- Jun-13: 676,898
- Jun-12: 424,480
- Jun-11: 277,897
- Jun-10: 155,502

Fixed-line broadband
- Jun-14: 963,429
- Jun-13: 629,964
- Jun-12: 389,130
- Jun-11: 254,947
- Jun-10: 141,892

Wireless* broadband
- Jun-14: 32,731
- Jun-13: 27,232
- Jun-12: 25,301
- Jun-11: 19,149
- Jun-10: 13,330

Mobile handset
- Jun-14: 38,734
- Jun-13: 19,636
- Jun-12: 9,943
- Jun-11: 3,695
- Jun-10: †

Dial-up
- Jun-14: 65
- Jun-13: 66
- Jun-12: 106
- Jun-11: 106
- Jun-10: 280

*Excludes downloads via mobile phone handsets. Includes mobile wireless services using dongle, USB modems and datacards, satellite, and fixed wireless.
†Mobile handset data not available for Jun–10.
Note: Total volume of data downloaded is based on ABS published numbers and components may not add up due to rounding. The 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, Australia, June 2014.

During the June quarter of 2013–14, fixed-line broadband subscribers were downloading on average 29 times the amount of data compared to wireless broadband subscribers, and over 80 times that of a mobile handset internet subscriber. During this period, the average amount of data downloaded by a subscriber over:

> fixed-line broadband increased by 44 per cent to 155.0 gigabytes

> wireless broadband increased by 26 per cent to 5.4 gigabytes

> mobile handset internet increased by 90 per cent to 1.9 gigabytes.

Performing activities online

Growth in the volume of data being downloaded is similarly reflected in the increased availability, accessibility and popularity of online content and communications services.

Australians are continuing to participate in a range of diverse online activities. Figure 1.12 shows the three most popular online activities for Australian adult internet users at May 2014 were using the internet for research (94 per cent), using email (94 per cent) and general internet browsing (91 per cent).

Figure 1.12 Activities performed online in the six months to May 2014

Activity	Percentage
Email	94
Research and information	94
Browsing and surfing	91
Banking or paying bills	77
Social networking	69
Buying or selling	64
Working or studying from home	56
Streaming video or audio content	51
Accesing and using government websites	49
Downloading video or audio content	47
Accessing professional online video content	34
Online gaming	23
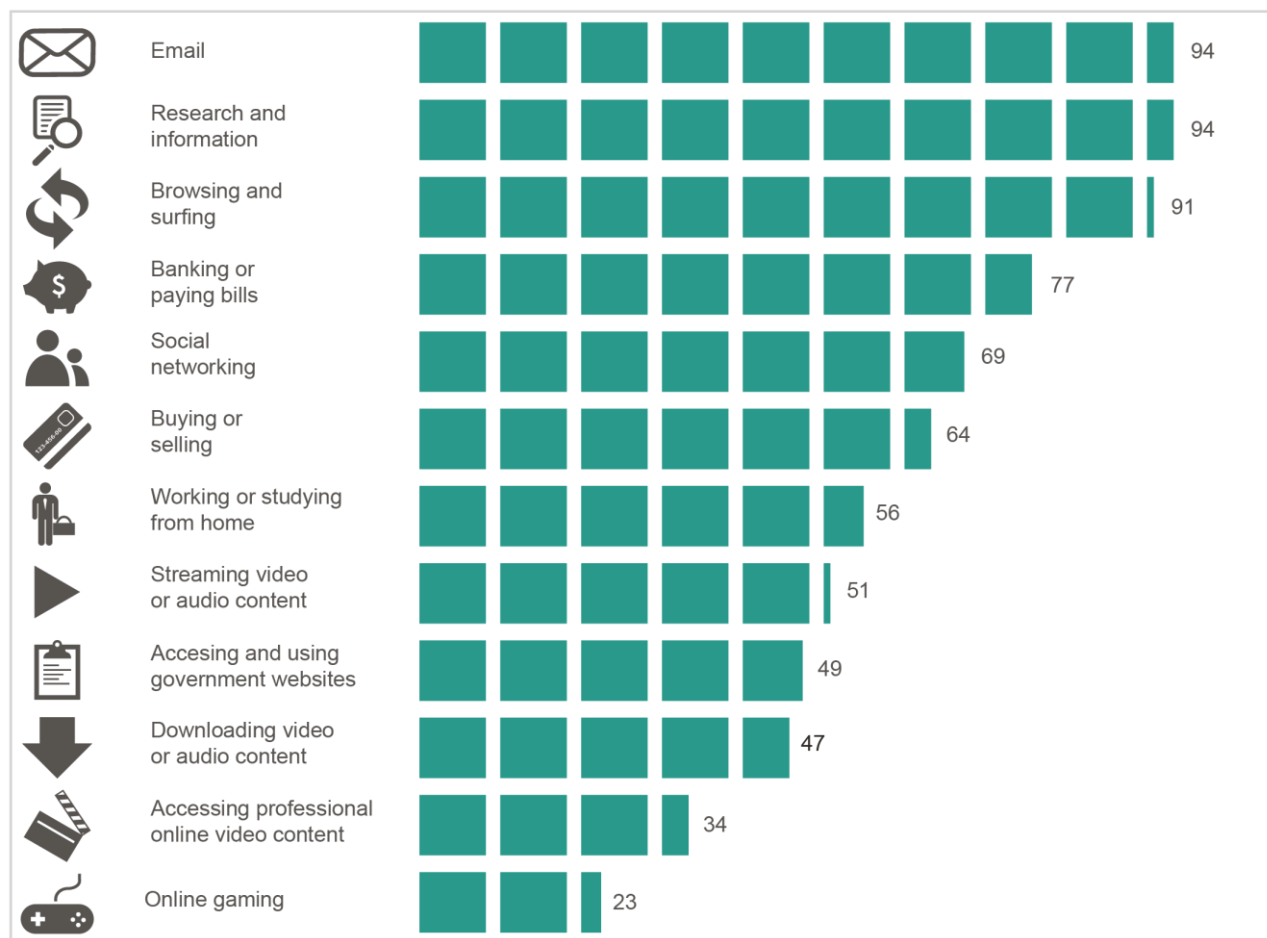
Base: Percentage of internet users aged 18 years and over.
Source: ACMA-commissioned survey.

Variety of internet access devices

The majority of Australians are increasingly using more communications devices to go online. In the six months to May 2014, 68 per cent of internet users accessed the internet via three or more devices, compared to 62 per cent in the six months to May 2013 (Figure 1.13).

Figure 1.13 Number of devices used to access the internet in the six months to May
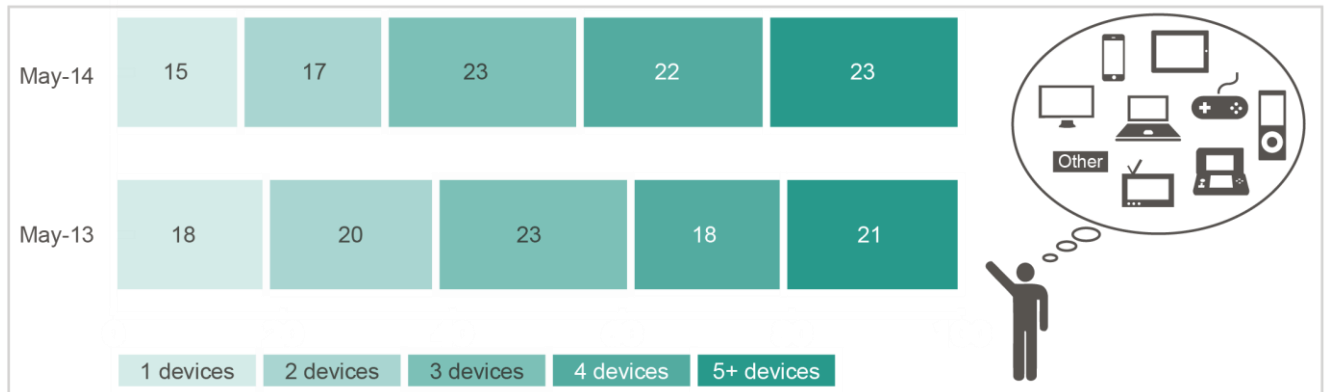
	1 devices	2 devices	3 devices	4 devices	5+ devices
May-14	15	17	23	22	23
May-13	18	20	23	18	21

Base: Percentage of people aged 18 years and over with a home fixed-line telephone and/or mobile phone.
Source: ACMA-commissioned surveys.

Diversification of consumer internet access devices

Australians with household internet access go online from home using a wide range of consumer devices (Figure 1.14). Underlining the move to mobile devices across the community in recent years, at May 2014, 76 per cent of Australians used mobile phones to access the internet while 74 per cent used a laptop computer. These are now the two most popular devices for accessing the internet from home, followed by desktop computers (67 per cent). During the 12 months to May 2014, 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 eight percentage points each.

Figure 1.14 Devices used to access the internet

Device	Period	Value
Mobile phone	May-14	76
	May-13	68
	May-12	61
Laptop computer	May-14	74
	May-13	75
	May-12	79
Desktop computer	May-14	67
	May-13	69
	May-12	73
Tablet computer	May-14	54
	May-13	46
	May-12	29
TV or Smart TV	May-14	27
	May-13	22
	May-12	19
Other games console	May-14	15
	May-13	15
	May-12	15
mp3 player	May-14	13
	May-13	15
	May-12	14
Portable games console	May-14	7
	May-13	7
	May-12	10
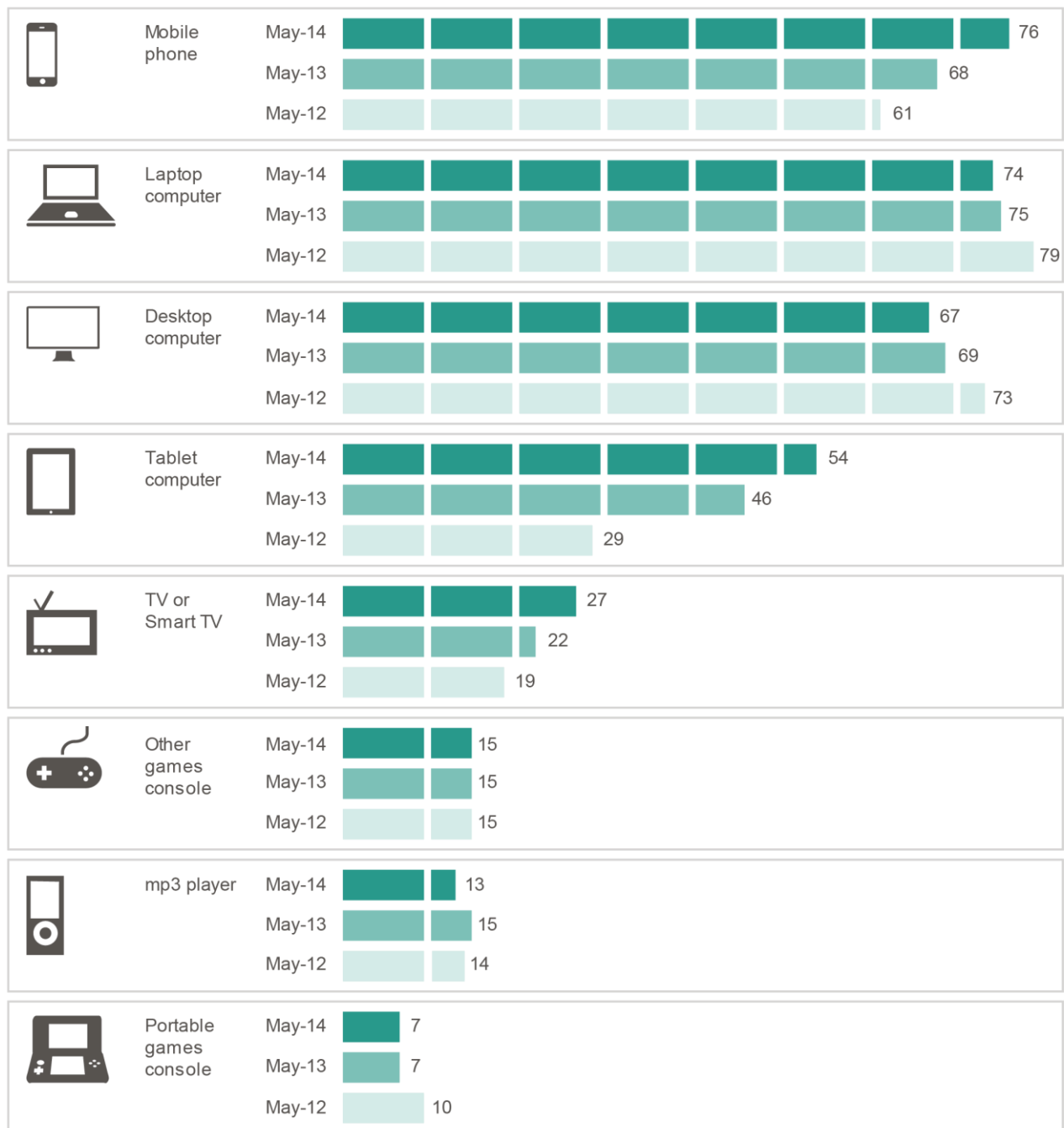
Base: Percentage of people aged 18 years and over with a fixed-line telephone and/or a mobile telephone who have accessed the internet in the last six months for personal use.
Note: Multiple responses allowed. Examples of devices include iPad for Tablet computer, PSP and Nintendo DS for portable games consoles, and iPod touch for mp3 players.
Source: ACMA-commissioned surveys.

The connected home environment

A large proportion of Australians' digital lives is experienced in the connected home environment, with home networks forming a critical part of the service delivery chain. Considering the increase in numbers of terminal devices and services typically found in a home today—personal and portable computers, tablets, smartphones, games consoles, security and home automation systems, connected appliances, central storage and backup systems—the home network can be quite complex.

At May 2014:

> approximately half of all Australian homes had more than five devices connected to the internet via a home network[25]

> of all devices connected to a home network, 82 per cent were connected via Wi-Fi, while only 14 per cent used wired technology only.[26]

Growth in frequency of internet use

As Australian internet services become faster and more portable—via broadband connections and internet-enabled devices—frequent internet use also grew during 2013–14 (Figure 1.15).

At June 2014, the number of frequent internet users—people who go online more than once a day—reached 11.14 million adult Australians, an increase of three per cent since June 2013.

Figure 1.15 Australians going online more than once a day (000s)

Number of Australians going online more than once a day

Jun-14	11,139
Jun-13	10,806
Jun-12	10,086
Jun-11	9,306
Jun-10	8,304
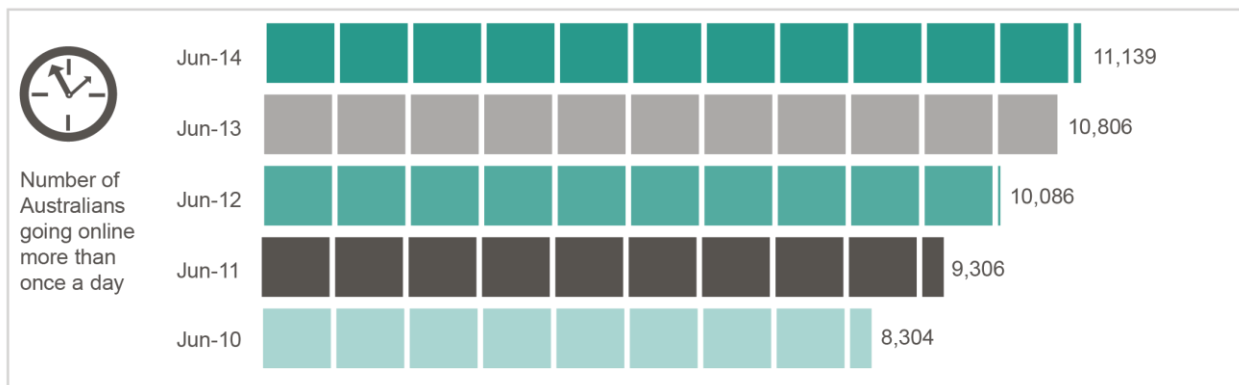
Base: Percentage of people aged 18 years and over, in the 12 months to June of each year.
Source: Roy Morgan Single Source.

Growth in online activities

Research shows that the digital lives of Australians are continuing to develop and broaden, as represented by growth in the number of different activities undertaken online. At June 2014, 50 per cent of adult Australians undertook five or more online activities in the previous four weeks (Figure 1.16), and the proportion of people reporting no online activities dropped to 20 per cent.

Figure 1.16 Number of different online activities undertaken
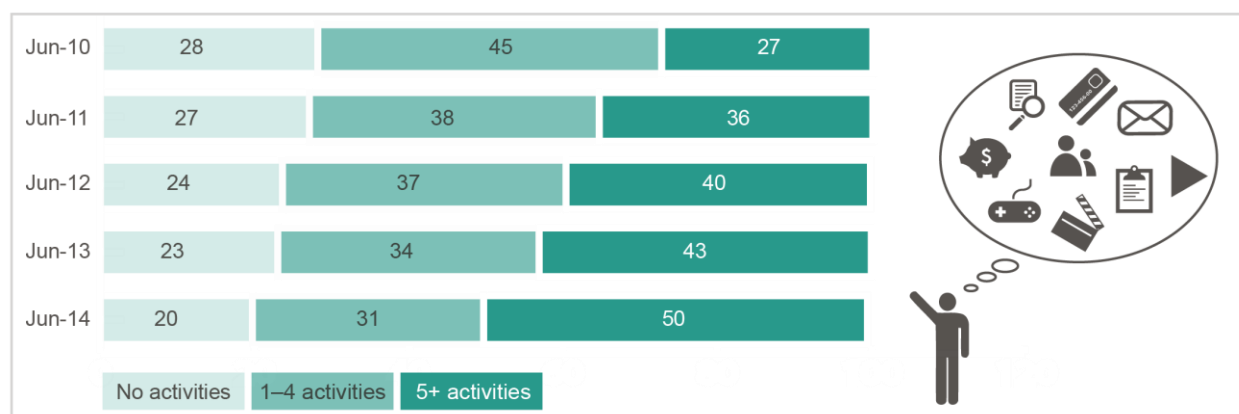
	No activities	1–4 activities	5+ activities
Jun-10	28	45	27
Jun-11	27	38	36
Jun-12	24	37	40
Jun-13	23	34	43
Jun-14	20	31	50

Base: Percentage of people aged 18 years and over, in an average four week period to June of each year. Includes people who do not have an internet connection.
Note: Types of activities include: communications; general browsing and research; entertainment; banking transactions; buying, selling and shopping transactions; non-transactional banking, buying, selling and shopping (e.g., checking account balances, viewing online catalogues); and blogs and online communities. Numbers may not add up to 100 per cent due to rounding.
Source: Roy Morgan Single Source.

The shift to online content

Driving factors in the shift to online content formats and growth in digital media activities include increases in the number of frequent internet users, growth in the volume of data downloaded and increases in the number of different activities users are performing online.

Digital media activities

During 2013–14, Australians continued the shift towards using digital media, with growth in the number of people downloading and streaming media such as movies, television, radio, music and video clips.

Streaming activities experienced strong growth in the five years to June 2014, increasing 21 percentage points to 44 per cent of adult Australians (6.4 million) streaming music, movies, TV programs, video clips or radio in an average four week period. Downloading activities have increased less dramatically over the same period, increasing by five percentage points to 31 per cent of adult Australians (4.5 million).

Figure 1.17 shows an increased preference of adult Australians to stream online content—the availability of higher-speed internet services, larger data download plans and growth in the use of cloud content services are contributing factors to increases in streaming and downloading.

Figure 1.17 Digital media activities undertaken online
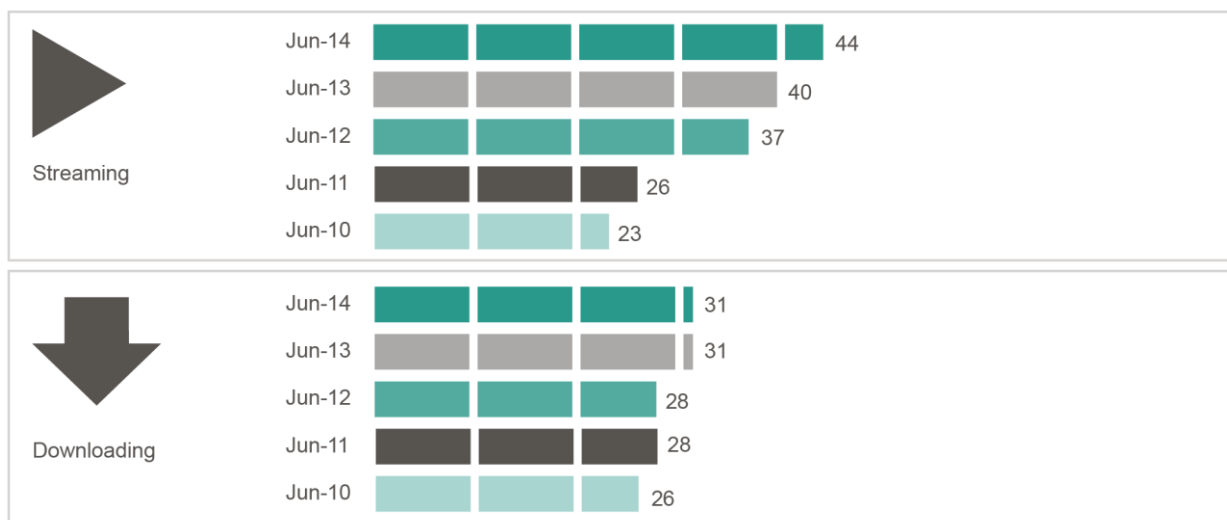
Base: Percentage of internet users aged 18 and over, in an average four week period to June of each year.
Source: Roy Morgan Single Source.

Despite increases in streaming activities, data from the OzTAM ratings agency shows that Australians have increased the amount of time they spend watching broadcast TV on a TV set, indicating that connected devices are complementing traditional TV viewing rather than replacing the activity.[27]

Online video content
A contributing factor to the increase in streaming of online content by adult Australians is growth in online video content services—including catch-up television, video on demand and commercial internet television. ACMA research showed that in the six months to May 2014, 8.22 million Australians accessed professionally produced video content services, an increase of 4.6 per cent from May 2013. Of those accessing these services:

> 6.94 million Australians used a catch-up television service (such as ABC iView, Plus 7 or Network 10 Catch-up) at least once

> 2.11 million used video on demand services (such as Quickflix or Foxtel on Demand)

> 1.44 million used a commercial internet television service (such as IPTV).

Online news services
Print newspaper circulations are declining both internationally and in Australia.[28] A large number of Australians are using online sources to access the news, with ACMA research showing 66 per cent of adult Australians (10.79 million) accessing news online at May 2014. Online news sources include online versions of print newspapers, digital newsletters such as Crikey, and a variety of news-based websites. The top ten news websites for the month of April 2014 were all online versions of print newspaper or television channels.[29] Some newspaper organisations have introduced online paywalls to compensate for the decline in print newspaper revenues. The number of people with a paid subscription to an online news service increased by over 100,000 people to 11 per cent of adult Australians (1.18 million) in the 12 months to May 2014.

Use of traditional broadcast media
Australians' use of traditional media channels (television and radio services) has remained relatively stable over the past five years. Figure 1.18 indicates a slight increase in the proportion of people who do not watch any free-to-air television while the proportion of people listening to radio services is relatively constant.

Figure 1.18 Use of television and radio

Some free-to-air tv viewing

		No free-to-air tv viewing
Jun-14	90	10
Jun-13	92	8
Jun-12	94	6
Jun-11	95	5
Jun-10	95	5

Some radio listening

		No radio listening
Jun-14	85	15
Jun-13	86	14
Jun-12	80	20
Jun-11	79	21
Jun-10	*	*
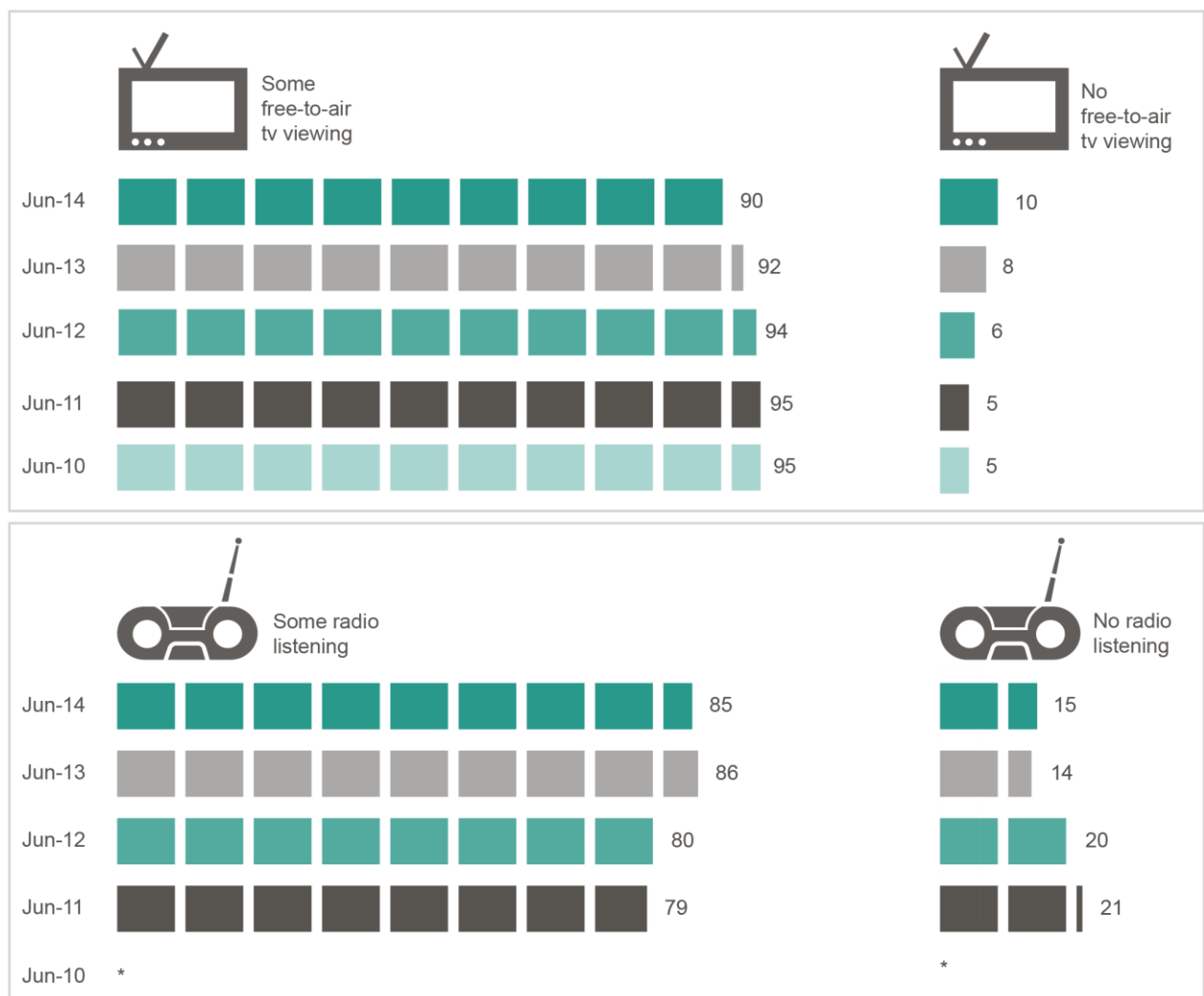
Data not available for radio services at June 2010.
Base: Percentage of Australians aged 18 years and over in an average seven-day period to June of each year.
Source: Roy Morgan Single Source.

FOXTEL's subscriber numbers increased by 5.6 per cent to 2.6 million in the financial year ending 30 June 2014.[30] Based on media reports, subscriber growth was driven by reduced churn and an increased take-up of internet television services.[31]

Australians' diverse use of communications services

While the internet plays an important role in their digital lives, Australians are increasingly using a diverse range of services to fulfil their communications needs. Most are combining multiple communications technologies and services to provide them with flexibility and the ability to use their services at any time and any place.

Mobile communications continues to be at the forefront of consumer communications activity (Figure 1.19), closely followed by email and texting with use remaining stable over the reporting period. Fixed-line telephone services have seen a continuing decline with new services such as social networking and instant messaging becoming more important to Australians.

Figure 1.19 Communications services used in the six months to May
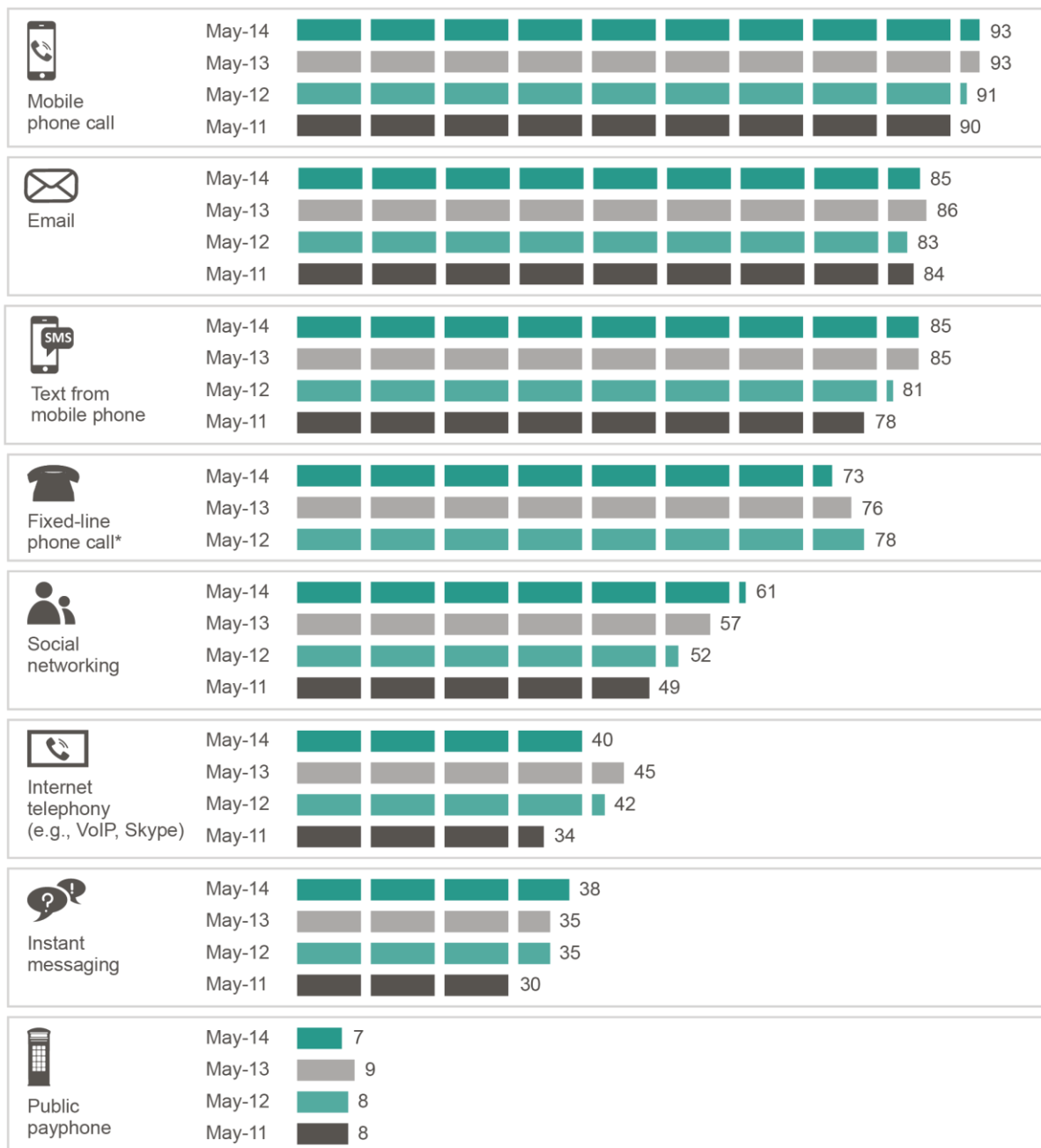
Mobile phone call
- May-14: 93
- May-13: 93
- May-12: 91
- May-11: 90

Email
- May-14: 85
- May-13: 86
- May-12: 83
- May-11: 84

Text from mobile phone
- May-14: 85
- May-13: 85
- May-12: 81
- May-11: 78

Fixed-line phone call*
- May-14: 73
- May-13: 76
- May-12: 78

Social networking
- May-14: 61
- May-13: 57
- May-12: 52
- May-11: 49

Internet telephony (e.g., VoIP, Skype)
- May-14: 40
- May-13: 45
- May-12: 42
- May-11: 34

Instant messaging
- May-14: 38
- May-13: 35
- May-12: 35
- May-11: 30

Public payphone
- May-14: 7
- May-13: 9
- May-12: 8
- May-11: 8

*Data not available prior to May 2012.
Base: Percentage of people with a fixed-line telephone and/or a mobile telephone aged 18 years and over.
Note: Data for 2011 was collected in April. Multiple responses allowed. VoIP data prior to 2014 is not directly comparable with the current year due to a methodological change.
Source: ACMA-commissioned surveys.

The complementary nature of communications use is reflected in the majority of consumers using five or more separate communications services. In the six months to May 2014, 63 per cent of communications consumers used five or more separate communications services. As shown in Figure 1.20, the pattern of complementary use is similar to the previous year compared with 62 per cent using five or more services in the six months to May 2013.

Figure 1.20 Number of communications services used in the six months to May
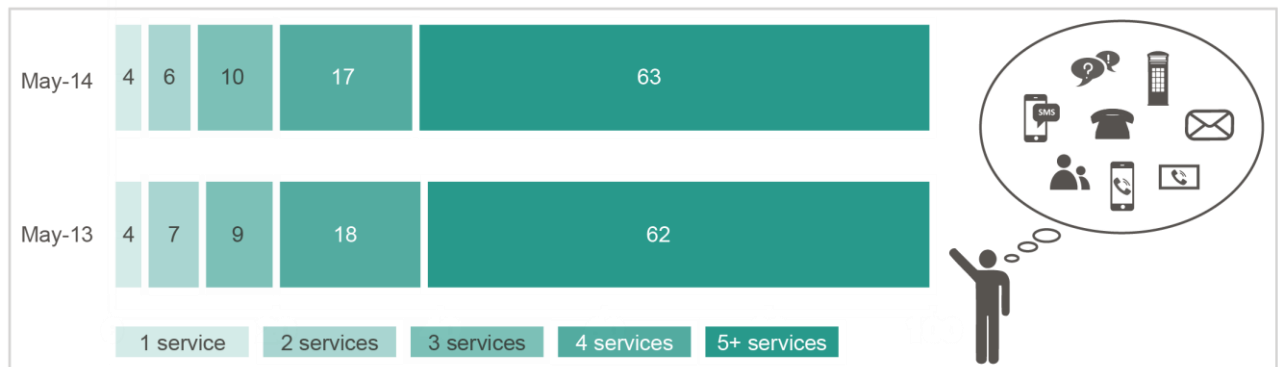
	1 service	2 services	3 services	4 services	5+ services
May-14	4	6	10	17	63
May-13	4	7	9	18	62

Base: Percentage of people aged 18 years and over with a home fixed-line telephone and/or mobile phone.
Source: ACMA-commissioned surveys.

Economic value of internet-related transactions

A key driver towards the shift to a digital life is the online supply and demand of goods and services. Australian consumers and businesses have contributed to the economic value of digital life through:

> increased participation in Australian online business with the '.au' domain

> growth in e-commerce activity

> increased expenditure on online advertising.

Participation in online business
Companies and organisations conducting business in Australia continued to recognise the importance of using the '.au' domain to identify the locality of their business.

This is reflected in the ongoing growth of .au domain name registrations—administered by .auDA (.au Domain Administration Ltd), the .au country code for Australia covers the second-level domains of '.com.au', '.edu.au', '.org.au', '.asn.au' and '.id.au'.

In the 12 months to June 2014, the number of registered .au domain names increased by seven per cent to 2.86 million. The '.com.au' domain continues to account for 86 per cent of second-level domains.

Domain names under '.gov.au' are administered by the Australian Government Information Management Office. At June 2014, 4,740 '.gov.au' domain names were registered, up from 4,666 at June 2013.[32]

Although '.au' domain name registrations continue to grow, not all sectors are fully represented in the breadth of online participation. Media reports suggest that only 10 per cent of manufacturing and wholesale companies are able to receive online orders, despite more than half of these Australian businesses placing orders directly with suppliers online.[33]

Growth in e-commerce activity
The latest available data from the ABS shows that Australian businesses generated an estimated $246 billion in revenue from the online sales of goods and services during 2012–13. This is a $10 billion increase on revenue received in 2011–12 and double the amount of revenue achieved five years prior during 2008–09.[34]

This is reflected in the increase of Australians who undertake online transaction activities—ACMA research shows an estimated 13.89 million people (78 per cent of the adult population) went online to conduct banking, pay bills, or buy and/or sell goods and services.

Online advertising expenditure

Facilitating growth in e-commerce activities is the value businesses place on advertising their goods and services through online advertising channels.

Expenditure on online advertising grew by 19 per cent to a total of $3.99 billion over the 2013 calendar year (Figure 1.21). This represented a 30 per cent share of total media advertising expenditure compared to 25 per cent in 2012 and 20 per cent during 2011. All online advertising categories experienced growth in expenditure during the 2013 calendar year.

Figure 1.21 Online advertising expenditure ($ millions)
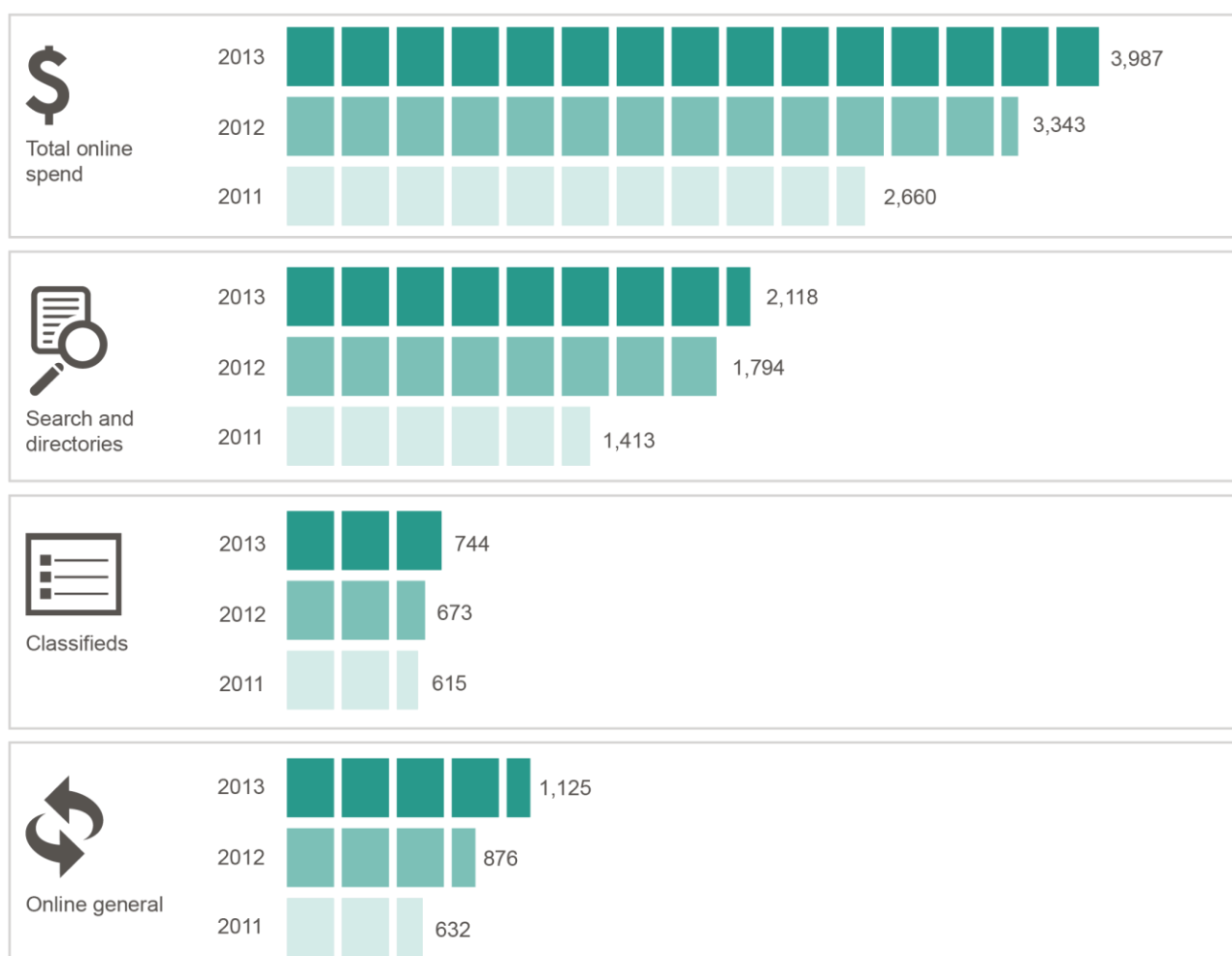
Advertising expenditure in main media

Commercial Economic Advisory Service of Australia (CEASA) data for the year ended 31 December 2013 shows that total advertising expenditure across the main media categories—print, television, radio, online, outdoor and cinema—increased by 0.8 per cent in 2013 to $13.38 billion. Online, print and television media attracted the majority of advertising expenditure during this period, with each of these media platforms accounting for approximately a third of total advertising expenditure (29.8, 27.8 and 29.9 per cent respectively).[35] However, in 2013, the amount of advertising expenditure on print media decreased by 16 per cent.

1.10 Consumer satisfaction with communications services

The majority of Australians are generally satisfied with their communications services. The highest levels of satisfaction (satisfied or very satisfied) are seen for fixed-line telephone services with 89 per cent, followed by mobile phone with 86 per cent.

Internet services had the highest levels of dissatisfaction with 13 per cent either dissatisfied or very dissatisfied (Figure 1.22).

Figure 1.22 Change in overall satisfaction with select communications services
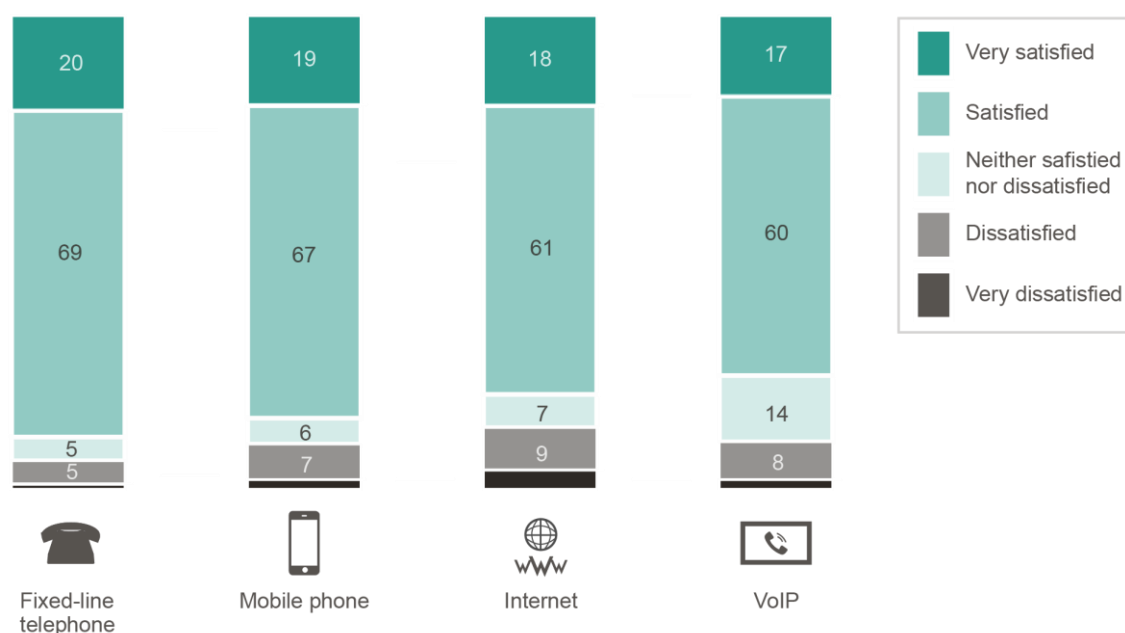
Note: Communications consumers are defined as having a fixed-line telephone and/or a mobile phone. Data <5 per cent not displayed. The response category 'Overall' is not an average of all other response categories. Respondents were asked a separate question about their overall level of satisfaction with each of the services identified. Data related to percentage of service users aged 18 years and over. Source: ACMA-commissioned survey.

Satisfaction with communications service components is outlined in Figure 1.23. The highest levels of satisfaction (very satisfied and satisfied) and dissatisfaction (very dissatisfied and dissatisfied) within each service were as follows:

> **fixed-line service**—the highest levels of satisfaction were for service reliability (89 per cent), while line rental cost (31 per cent) recorded the highest levels of dissatisfaction.

> **mobile phone**—billing information (86 per cent) recorded the highest levels of satisfaction, while call/service costs (20 per cent) recorded the highest levels of dissatisfaction.

> **internet**—billing information (82 per cent) also recorded the highest levels of satisfaction, while data speeds (25 per cent) recorded the highest levels of dissatisfaction.

Figure 1.23 Consumer satisfaction with communications services, May 2014

Service	Device	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Customer service	Fixed-line telephone	4	10	11	61	14
	Mobile phone	3	8	11	64	14
	Internet	4	11	14	56	16
Service reliability	Fixed-line telephone	2	5	4	70	19
	Mobile phone	3	11	8	65	14
	Internet	4	11	9	59	17
Call/service costs	Fixed-line telephone	3	14	11	63	9
	Mobile phone	4	16	9	61	11
	Internet	4	18	15	54	9
Billing information	Fixed-line telephone	2	7	7	72	12
	Mobile phone	2	6	6	73	13
	Internet	2	7	9	68	14
Line rental cost	Fixed-line telephone	6	24	13	50	6
Internet access	Mobile phone	2	10	10	64	15
Data speeds	Internet	7	18	12	51	12
Technical support	Internet	3	10	15	57	14
Speed of repairing faults	Internet	6	14	17	52	11

Legend:
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied
- Fixed-line telephone
- Mobile phone
- Internet

Note: Data relates to percentage of service users aged 18 years and over. Numbers may not add up to 100 per cent due to rounding.
Source: ACMA-commissioned survey.

1.11   International trends

While there is limited internationally comparable data available, data that is currently available allows a broad-level comparison of communications services, internet adoption levels, and device take-up and usage between Australia, the United States (US) and the European Union (EU).

Communications services

The continued, but slow, shift from fixed-line telephones is evident in other countries:

> 68 per cent of households in EU countries had a fixed-line telephone at January 2014, a decrease of two percentage points from March last year[36]

> 84 per cent of households in the United Kingdom (UK) had a fixed-line telephone at December 2013 (no change from last year) with 16 per cent of the population living in a mobile-only household[37]

> As of January 2014, 90 per cent of the population in the US owned a mobile phone down one percentage point from May 2013[38] and in the UK, 93 per cent[39] (a decrease of two percentage points from the previous year).[40]

Access to the internet

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 1.9).

Table 1.9 International trends in access to the internet

	Home internet access (%)		Home broadband connection (%)		Used mobile phone to access the internet* (%)	
	2013	2014	2013	2014	2013	2014
Australia†	80	81	74	81	62	70
US	n/a	n/a	70	n/a	60	n/a
UK	80	84	75	77	49	57
EU	68	65	61	60	49	52

*Internet use via mobile phones relates to use in the six months to May.
†Refers to total population aged 18 years and over.
Note: Data for the UK and EU about home internet access and broadband connection relates to households. UK data collected in January/February. US data on mobile phone internet use has no time period defined. EU data collected in January.
Sources: Data relating to Australia, ACMA-commissioned survey May 2013 and 2014, UK Ofcom, US Pew Internet Project, and EU data sourced from Eurobarometer.

Internet access devices

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

> smartphone ownership up 13 percentage points to 58 per cent in the US and 11 percentage points to 56 per cent in the UK

> tablet ownership up 13 percentage points to 42 per cent in the US[41] and 17 percentage points to 29 per cent in the UK.[42]

International trends—digital life

Greater access to internet and fast and reliable broadband services in Australia has facilitated more frequent use, growth in data downloaded, an increase in the number of activities undertaken online and changing behaviours in the ways Australian internet users engage in day-to-day activities in an online environment.

These trends are illustrated internationally, reflected by the growth in the range of activities undertaken online (see Table 1.10). For example, research shows that popular online activities in the UK not only included regular activities such as internet browsing (91 per cent) and sending email (90 per cent), but also buying things online (66 per cent) and paying bills online at least quarterly (61 per cent).[43]

Table 1.10 International trends—activities performed online

		Australia (%)	UK (%)
	Sending and receiving emails	94	90
	General surfing/browsing	91	91
	Banking and paying bills	77	61
	Looking at social networking sites/apps	68	69
	Buying things	63	66
	Playing games	23	30

Base: Percentage of internet users aged 18 years and over.
Note: Data from UK collected October to November 2013.
Source: Data relating to Australia is from an ACMA-commissioned survey, May 2014. Data relating to UK is from Ofcom.

International comparisons—fixed broadband versus mobile internet penetration

While Australia is one of the leaders in terms of mobile-internet penetration, it has a lower level of fixed broadband in comparison to other countries. Research by the Broadband Commission for Digital Development shows that at December 2013, Australia was ranked:

> 4th in terms of mobile-internet penetration per 100 inhabitants (out of 138 countries)
> 32nd in terms of fixed-line broadband penetration per 100 inhabitants (out of 190 countries).[44]

Mobile 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.[45] Developments in Australia also reflect trends internationally.

For example, research shows that mobile phone users in the UK used their phones for a wide range of communications and entertainment activities. Over half of mobile phone users (55 per cent) sent or received email, 53 per cent visited social networking sites, 38 per cent used their phone to upload photos or videos, and 13 per cent watched TV programs at least quarterly.[46]

Growth in online shopping

The continued growth in the number of Australians shopping online is consistent with international trends. Figure 1.24 shows that in 2012, Australia was ranked second (of the nine surveyed) in terms of average per head annual expenditure on online purchases, just behind the UK.

Figure 1.24 Average annual expenditure on online purchases per head (£)

UK	Australia	US	Japan	France	Germany	Spain	Italy
1,175	867	663	560	539	374	180	126
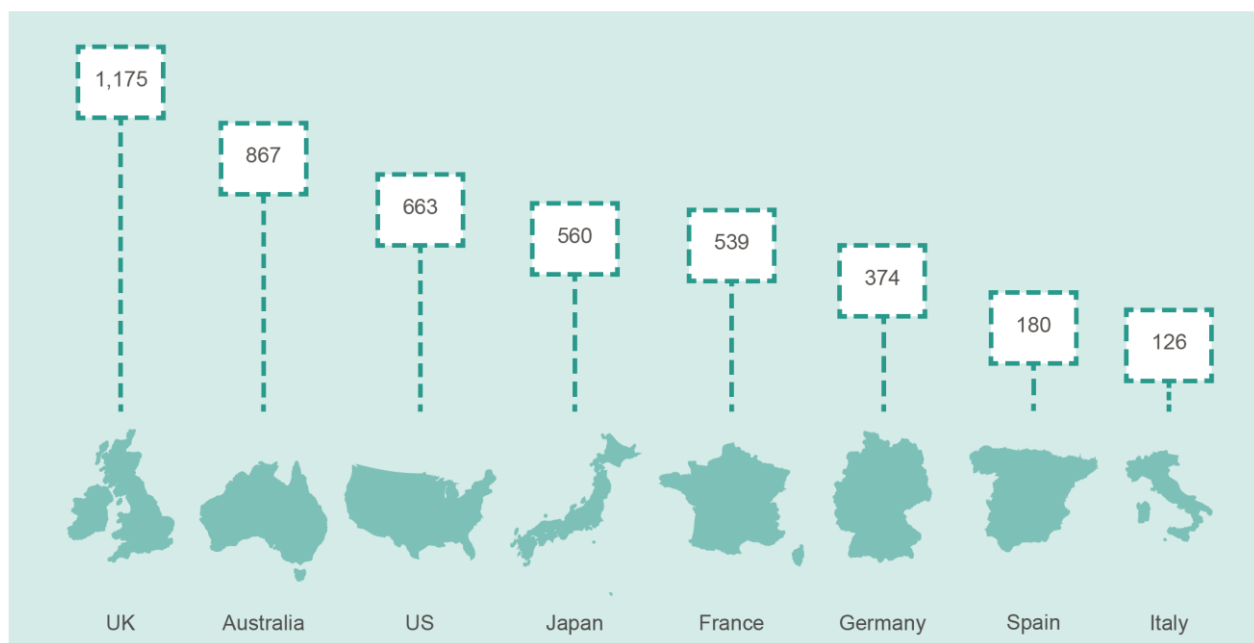
Base: Internet users aged 18 years and over.
Source: Ofcom, International Communications Market Report, December 2013.

Endnotes

[1] M Vertigan, A Deans, H Ergas, and A Shaw, 'Independent Cost-Benefit Analysis of Broadband and Review of Regulation. Volume II – The costs and benefits of high speed broadband', August 2014.

[2] Telstra, 'Full Year 2014 Financial Results—CEO/CFO Analyst briefing presentation', 14 August 2014.

[3] Estimated number of retail and wholesale fixed-line telephone services in operation based on information from company annual reports, publicly available financial statements and previous data collected from industry by the ACMA.

[4] www.pace.com/global/our-thinking/over-the-top-services-ott/, accessed 27 August 2014

[5] ASX Market Announcements, Australian Securities Exchange, 2 May 2014.

[6] Hutchison Telecommunications (Australia) Limited, ASX half year information 30 June 2014, 22 July 2014.

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

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Chapter 2
National interest issues

2.1   Overview

This chapter provides updated information on the performance of the emergency call service. It also discusses the communications industry support for law enforcement and national security agencies that is focused on the maintenance of 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 provided.

Key developments during 2013–14 included:

> a four per cent decrease in number of calls to the emergency service numbers Triple Zero and 112

> a 20 per cent decrease in the number of formal warnings issued to callers for misusing the Triple Zero service

> Telstra again performing above emergency call answering regulatory requirements, in terms of the time taken to answer each call

> the number of disclosures made by CSPs and carriers reported under section 308 of the Act increased by nine per cent

> no requests for new submarine cable protection zones were considered

> a five per cent increase in the cost to industry of providing interception capabilities

> a 54 per cent increase in domestic systems interference complaints

> a 24 per cent decline in radiocommunications interference complaints.

2.2   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

Triple Zero has established a recorded voice announcement (RVA) to provide callers who have inadvertently dialled Triple Zero the opportunity to hang up before the call is connected to the ECP. In 2013–14, four per cent of calls to Triple Zero were from callers who hung up during the RVA before connection to the ECP and 96 per cent of calls were connected to the ECP.

ECP data shows a decrease in the number of calls to the Triple Zero and 112 emergency service numbers in 2013–14 (see Table 2.1). During this period, there were 8,481,470 calls to Triple Zero and 112, a decrease of 373,258 (4.2 per cent) from 2012–13. The ECP has attributed this decline to the increased promotion of the appropriate use of the Triple Zero services and alternative numbers, such as 132 500, the State Emergency Service number.

In 2013–14, 66.5 per cent of emergency calls were made from mobile phones (see Table 2.1). Calls from fixed-line telephones represented 31 per cent of emergency calls, 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 well 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 that is responsible for arranging for the dispatch of an emergency response. In 2013–14, 5,738,061 calls were transferred to an ESO, a slight increase of 0.2 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 that was introduced in July 2009, and is managed by Telstra (as the ECP for Triple Zero 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 2013–14, 630 callers were formally warned for misusing the Triple Zero service, compared to 796 in 2012–13, representing a 20 per cent decrease over the year. No services were suspended.

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

	2009–10	2010–11	2011–12	2012–13	2013–14
Total number of calls offered	**8,833,683**	**8,867,191**	**9,429,595**	**8,854,728**	**8,481,470**
Calls answered (%)	95.4	95.8	96.0	96.0	96.0
Of calls answered, those that wait five seconds or fewer (%)	96.7	95.7	95.8	95.8	95.4
Of calls answered, those that wait 10 seconds or fewer (%)	99.0	99.1	98.9	99.1	99.3
Calls transferred to an ESO	**5,288,836**	**5,354,680**	**5,561,072**	**5,727,411**	**5,738,061**
Answered calls transferred to an ESO (%)	62.8	63.1	61.5	67.5	70.6
Calls offered from mobile phones (%)	62.9	63.9	67.3	66.9	66.5
Transferred calls made from mobile phones (%)	51.1	52.6	55.4	58.0	59.6

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 refers 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 by an ESO. During the reporting period, the mobile carriers responded to 12,225 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 available to emergency service organisations to take up by the end of September 2014.

Enquiries and complaints about the Triple Zero service

During the reporting period, the ACMA received a small number of enquiries about the Triple Zero service, but did not commence any investigations into a CSP's compliance with the requirement to provide Triple Zero access. Most of the enquiries 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.

TPG Federal Court judgement

In April 2014, the Federal Court of Australia ordered TPG Internet to pay penalties totalling $400,000 for contraventions of the Emergency Call Service Determination.

This followed an investigation by the ACMA into a complaint about a failure to connect a call made to the Triple Zero emergency call service on a home telephone service supplied by TPG Internet. The call was made in circumstances where an individual required urgent medical attention.

During the course of the ACMA's investigation, TPG Internet advised that, as a result of an error in a software upgrade to its systems, from 15 March 2011 to 21 September 2011, the end users of 5,979 home telephone services—whose customers had failed to maintain an appropriate credit balance—did not have access to the Triple Zero emergency call service until the credit balance was restored. Telephone records provided by TPG Internet indicated that, during the relevant period, 193 calls were made to Triple Zero on 100 of those home telephone services, and none of which were connected.

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 155 genuine calls to ESOs via the 106 text emergency service in 2013–14, compared to 199 genuine calls in 2012–13 and 142 in 2011–12.

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.

The NRS introduced three new service access options under new agreements on 1 July 2013. These include SMS relay and Video relay, which commenced from that date and Captioned relay, which commenced on 28 October 2013. There were 206 calls made from the three new access options during 2013–14.

A total of 559 genuine emergency calls were made via the NRS across all of these modes in 2013–14, compared with 475 calls made during 2012–13 (Figure 2.1).

Figure 2.1 Genuine emergency calls via the NRS

Legend: 2012–13, 2013–14

Service	2012–13	2013–14
TTY—106	199	155
TTY—000	87	63
Internet relay—000	187	123
Speak and listen—000	0	12
SMS relay—000*		180
Captioned relay—000*		25
Video relay—000*		1
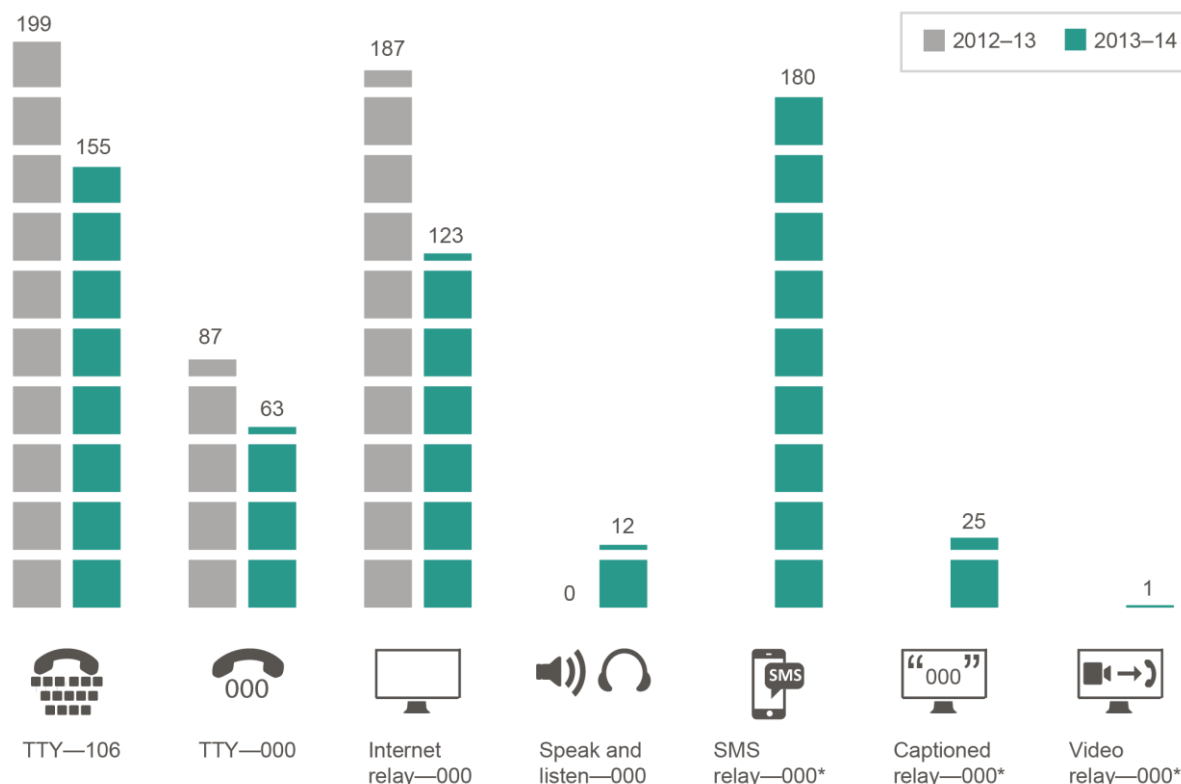
New services introduced in 2013–14.
Base: Number of calls.
Source: NRS service provider (ACE).

2.3   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 information regarding 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.

On 16 July 2014, the House of Representatives Standing Committee on Infrastructure and Communications commenced an inquiry into the use of section 313 by government agencies for the purpose of disrupting illegal online services. The committee is due to report in July 2015.

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), Telecommunications Industry Ombudsman (TIO) or Telecommunications Universal Service Management Agency (TUSMA) 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 2013–14, the number of disclosures, as reported to the ACMA under section 308 of the Act, increased by nine per cent from 2012–13. The number and reason for disclosures made during 2013–14, 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	
		2012–13	2013–14
Under Part 13 of the *Telecommunications Act 1997*			
Authorised by or under law	280	13,693	11,526
Made as a witness under summons	281	542	553
To assist the ACMA	284(1)	1530	896
To assist the ACCC	284(2)	1	12
To assist the TIO	284(3)	34,560	10,785
To assist the TUSMA	284(4)	29	0
Calls to emergency service number	286	4,001	8,422
To avert a threat to a person's life or health	287	12,000	12,453
Communications for maritime purposes	288	0	0
With the knowledge or consent of the person concerned	289	66,788	120,357
In circumstances prescribed in the Telecommunications Regulations 2001	292	0	2
Connected with an exempt disclosure	293	426	273
Subtotal		***133,570***	***165,279***
Under the *Telecommunications (Interception and Access) Act 1979*			
Voluntary disclosure	177	236	73
Authorisations for access to existing information or documents — Enforcement of the criminal law	178	538,317	563,012
Authorisations for access to existing information or documents — Locating missing persons	178A	1,233	3,170
Authorisations for access to existing information or documents — Enforcement of a law imposing pecuniary penalty or protection of the public revenue	179	8,183	9,162
Authorisations for access to prospective information or documents	180	4,209	7,346
Enforcement of the criminal law of a foreign country — Existing information	180A	6	17
Enforcement of the criminal law of a foreign country — Prospective information	180B	3	20
Subtotal		***552,187***	***582,800***
Total		**685,757**	**748,079**

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 22 carriage services in 2013–14 under section 315 of the Act.

2.4   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 networks.

In 2013–14, the cost to industry of providing interception capability was $19.3 million (Figure 2.2), an increase of approximately five per cent from 2012–13.

Figure 2.2 Cost of providing interception capabilities ($ million)
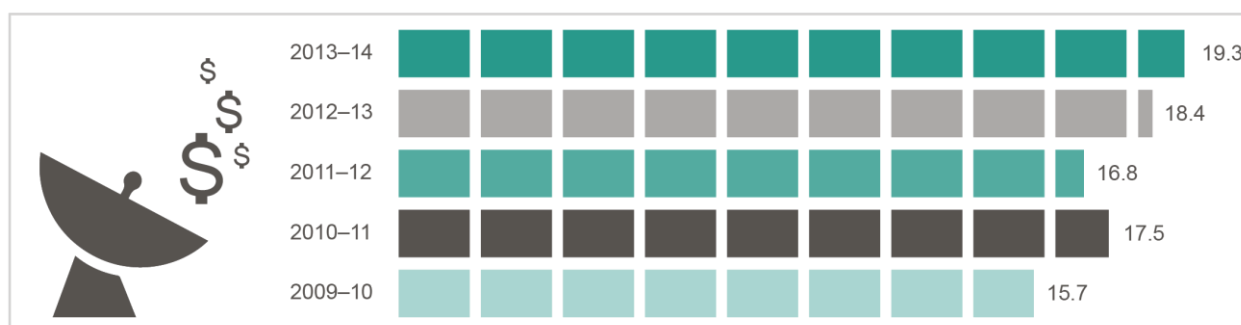
Interception capability plan compliance

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.

During the reporting period, the AGD did not refer any carriers to the ACMA for enforcement action.

2.5   Role of the Integrated Public Number Database (IPND)

The IPND is a telecommunications industry-wide database of all listed and unlisted public numbers and their associated customer data. Law enforcement agencies and emergency services regularly access customer data from the IPND and it is critical that the data is accurate for these purposes.

Telstra reported that the IPND contained 64.8 million connected records at 30 June 2014, an increase of just over one per cent on the 64.1 million records held one year previously.

CSP compliance with IPND requirements

The ACMA's compliance program includes a package of measures developed to improve compliance by CSPs with their IPND-related regulatory obligations and, in so doing, improve the quality and completeness of data contained in the IPND.

In 2013–14, a key compliance activity was to monitor monthly the percentage of customer records each data provider has in the IPND with one or more soft errors, as identified by the IPND Manager. A soft error means a potential error in a record identified during the validation of the file uploaded to the IPND at the field level. This monitoring resulted in the ACMA raising potential compliance issues with 15 CSPs. All 15 CSPs contacted by the ACMA have taken steps to improve the quality of the customer data they provide to the IPND Manager, with nine of the 15 CSPs having reduced their soft error rate to below five per cent by 30 June 2014. The remaining six CSPs are introducing systems and process changes to address the issue.

Lycamobile enforceable undertaking over IPND rule breaches

In September 2013, the ACMA accepted an enforceable undertaking from CSP Lycamobile, following an investigation that found it had breached its obligations to provide accurate customer information to the IPND.

The enforceable undertaking commits Lycamobile to:

> upgrade its IPND data collection and error correction processes
> audit its existing records against address validation software
> instigate a comprehensive training and education process
> report regularly to the ACMA for two years.

Since the enforceable undertaking was accepted, the quality of Lycamobile's customer data has improved significantly, with the percentage of incorrect customer records at a fraction of previous levels.

2.6   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, under this code, there were no code breaches and that new complaint issues declined two per cent compared with the previous year to 523.

2.7   Submarine cable protection

Australia currently has three submarine cable protection zones—two located off the Sydney coast and one located off the Perth coast.

Submarine cables carry the bulk of Australia's international voice and data traffic and contribute significantly to the Australian economy.

Schedule 3A of the Act permits the ACMA to declare protection zones over nationally significant cables and to prohibit or restrict activities that pose a risk of damaging cables in these zones. The legislation establishes offences for damaging a cable or for breaching prohibitions and restrictions, and creates penalties for these offences. 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.

No requests for new submarine cable protection zones were considered during 2013–14.

The legislation also provides for a permit regime that requires carriers to obtain a protection zone installation permit (PZ permit) from the ACMA to install a new submarine cable inside a protection zone or a non-protection zone permit (NPZ permit) to install a submarine cable outside of a protection zone.

Two applications for NPZ permits were granted to separate carriers during 2013–14. Both NPZ permits allow installation of submarine cables in the waters beyond the Perth Submarine Cable Protection Zone (Perth PZ).

Two applications for PZ permits were also granted during 2013–14 to install submarine cables, one in the Perth PZ and the other in the Southern Sydney PZ.

Two requests to extend an existing PZ permit were received in 2013–14 and one request to vary an existing PZ permit was also received by the ACMA.

2.8   Radiofrequency interference complaints

Under the *Radiocommunications Act 1992* (the Radiocommunications Act), the ACMA investigates complaints about radiofrequency interference to licensed radiocommunications equipment and services. The ACMA classifies interference 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. A new complaints process requiring those affected by DSI to seek the assistance of a technician before making a complaint to the ACMA was introduced during the reporting period.

During 2013–14, 84 per cent of DSI complaints were about terrestrial digital television and 16 per cent about other domestic systems interference. The large proportion of digital television interference complaints can be associated with the move to digital-only reception.

Masthead and distribution amplifiers (associated with television antenna installations) and household equipment (excluding computers) continue to be the major contributing sources of DSI.

Just over 19 per cent of DSI complaints required compliance action by the ACMA in 2013–14.

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 2013–14, mobile telephone services continued to be more affected by interference than any other type of service. Complaints of interference to 3G mobile services slightly reduced compared to the previous year, while complaints about 2G (GSM) mobile services remained similar.

The number of overall complaints decreased to 398 in 2013–14 from 523 in 2012–13 (Figure 2.3). Radiocommunications transmitters continue to be the significant source of interference. During the reporting period, there was a decrease in compliance actions involving issuing advice and warning notices. These compliance actions were generally effective and required no further action. Consequently, no prosecutions relating to RCI were initiated.

Figure 2.3 Domestic systems interference and radiocommunications interference complaints and compliance actions
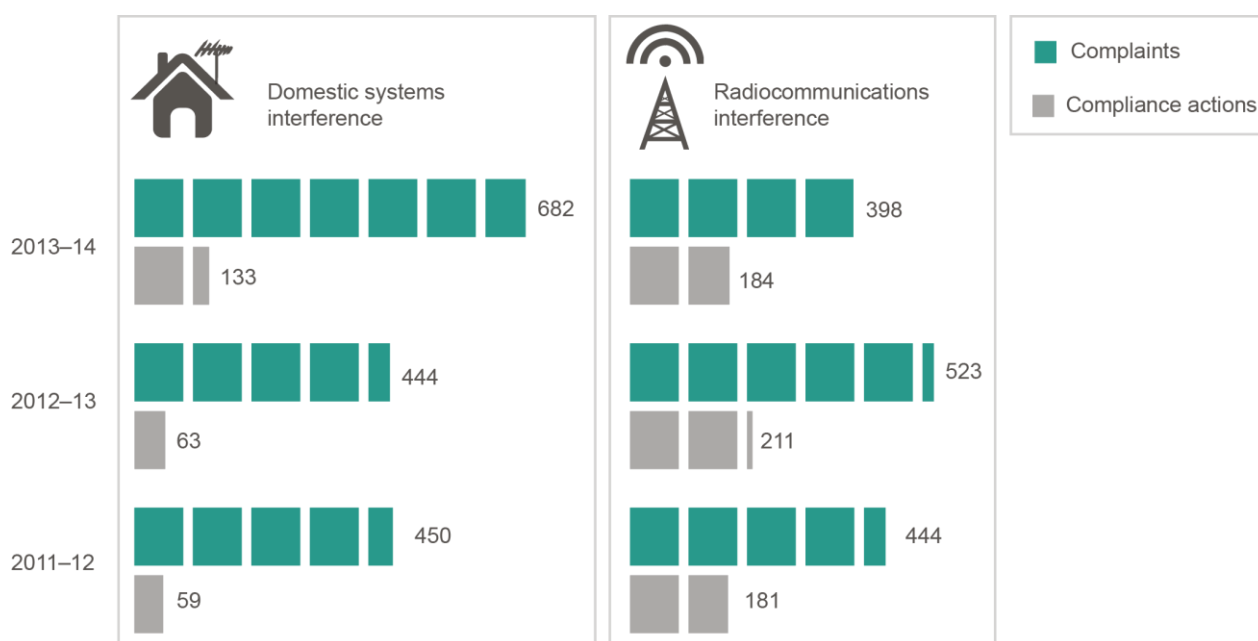
Base: Number of complaints and compliance actions.
Source: Domestic system interference and radiocommunications interference complaints to the ACMA.

Endnotes

[1] The definition of a carrier under section 5 of the TIA Act includes CSPs for these provisions.
[2] Nominated CSPs are CSPs covered by a declaration in force under subsection 197(4) of the TIA Act.

Chapter 3
Telecommunications consumer safeguards and quality of service

3.1 Overview

This chapter presents analysis and information about the telecommunications industry's performance in meeting key regulatory obligations including the Telecommunications (Customer Service Guarantee) Standard 2011 (CSG Standard), the Network Reliability Framework (NRF), provision of priority assistance to customers, number portability, telemarketing and spam investigations, industry compliance with telecommunications codes, and trends in TIO complaints.

Key developments on these matters during 2013–14 included:

> all qualifying CSPs meeting the CSG Benchmarks

> a 10 per cent increase in the number of participants on the DNCR, increasing by more than 860,000 numbers in 2013–14, taking the total amount of numbers listed to 9.6 million

> a 12.4 per cent decline in the number of complaints to the TIO, down to 138,946 new complaints in 2013–14

> declines in the total number of payphones (down 5.0 per cent to 28,068) and the number of fixed-line services covered by the CSG Standard (down 2.2 per cent to 6.54 million services)

> an increase in the amount of compensation payments to customers as a result of failing to meet CSG Standard time frames, up 2.4 per cent to $8.08 million

> an eight per cent increase in the number of local numbers ported (up to 821,760 ports) and a four per cent decrease in the number of mobile numbers ported (down to 1.67 million ports)

> an increase in the average number of computer infections reported under the Australian Internet Security Initiative, up from 16,034 per day in 2012–13 to 25,839 per day at May 2014.

3.2 Telecommunications Industry Levy (TIL) and telecommunications 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 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.

Industry levies and payments

The TIL amount of a licensed telecommunications carrier is the amount which that carrier must contribute to the cost of funding the activities of TUSMA. For the purposes of the TIL, a 'participating person' under the TUSMA Act is a carrier with eligible revenue in excess of $25 million. Carriers who submit an eligible statutory declaration by 31 October and whose revenue is less than $25 million are not assessed for the TIL. Contributions are, in general, proportionate to that participating person's share of the industry's total eligible revenue for the relevant period.

The ACMA manages the assessment and collection of levies over a three-year cycle (see Figure 3.1).

Figure 3.1 Collection and assessment of levies

Eligible Revenue Period (ERP) 2012–13	Eligible Levy Period (ELP) 2013–14	Financial year 2014–15
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

Final TIL assessment

Following advice from TUSMA, the Minister for Communications estimated the amount of the TIL as $255,559,000 for the 2013–14 Eligible Levy Period (ELP) on 17 June 2013 and $221,000,000 for the 2014–15 ELP on 25 June 2014. The final levy amount to be collected for the 2013–14 ELP is $221,000,000 and invoices will be issued and collected during the 2014–15 financial year.

The TIL invoiced for the 2012–13 ELP was $254,927,064. There were 206 carriers during 2011–12 and, of these, 52 were assessed as participating persons for the 2012–13 ELP.

As a transitional arrangement, the Commonwealth contributed $34,108,1665 to 'cap' the total non-Telstra contribution for the 2012–13 TIL at the same amount paid by them for the previous year's Universal Service Obligation (USO) and NRS levies.

3.3   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 2013–14, the total number of payphones (both Telstra-operated and privately operated) in Australia fell by five per cent from 29,523 to 28,068. This comprised a:

> net decrease of 1.3 per cent in the number of Telstra-operated payphones, from 18,035 to 17,805

> net decrease of 10.7 per cent in the number of privately operated payphones, from 11,488 to 10,263.

During the reporting period, there was a decrease of 0.2 per cent in the number of Telstra-operated payphone sites, from 14,938 to 14,915 (noting some sites have more than one payphone). At 30 June 2014, 63.4 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 3.2 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 declined over time from 304 payphones in the 2010–11 reporting period to 230 payphones in the 2013–14 reporting period.

Figure 3.2 Number of payphones in operation
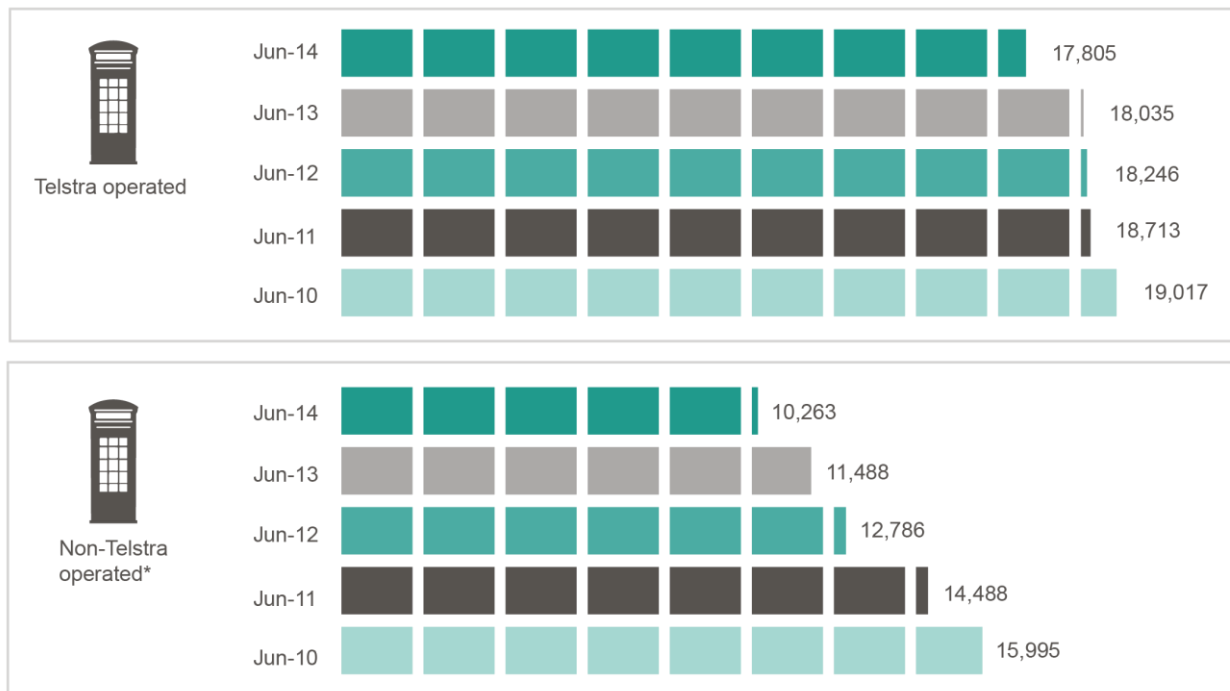
Includes TriTel payphones and payphones provided via Telstra access lines.
Source: Telstra and TriTel.

Table 3.1 provides the geographic distribution of Telstra payphones and payphones provided via Telstra access lines as at 30 June 2014.

Table 3.1 Distribution of Telstra payphones by geographical category, 30 June 2014

	Urban	Rural	Remote*	RIC
Telstra-operated payphones	12,735	4,196	874	582
% of total	71.5	23.6	4.9	3.3
Other payphones (provided via Telstra access lines)	7,310	1,778	379	253

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 3.2 shows Telstra's national performance in repairing faults for 2013–14 against the payphone fault repair performance benchmarks. Failure to meet a benchmark may result in the ACMA taking compliance action.

Table 3.2 Telstra payphone fault repair performance, 2013–14

	Urban (%)	Rural (%)	Remote (%)*
Payphone fault repair benchmark	90.0	90.0	80.0
Fault repair performance	96.3	94.9	91.2

RIC=Remote Indigenous communities.
*Including RIC.
Source: Telstra.

Payphones for people with disabilities

At 30 June 2014, Telstra had 153 teletypewriter payphones in operation in metropolitan and regional areas, an increase of two from the previous year.

3.4 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. The CSG Standard allows for exemptions from meeting service standards under certain circumstances. If a CSP fails to meet the minimum performance standards, compensation may be payable to the customer.

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 'qualifying carriage service providers' (QCSPs). QCSPs are those that have 100,000 CSG services or more, as at the last day of each financial year and currently comprise Telstra, Optus, iiNet, Primus and Dodo. At 30 June 2014, there were 6.54 million services subject to the CSG Standard, compared to 6.68 million at 30 June 2013—a decline of 2.2 per cent (Table 3.3).

Table 3.3 Services subject to the CSG Standard by provider, 30 June

	2010 ('000)	2011 ('000)	2012 ('000)	2013 ('000)	2014 ('000)
iiNet	n/a	370*	493	418	443
Optus	949	930	913	850	799
Primus	127	115	103	101	95
Telstra	6,038	5,828	5,608	5,314	5,038
Dodo	n/a	n/a	n/a	n/a	159
Other	242	43	0	0	0
Total	**7,356**	**7,286**	**7,117**	**6,683**	**6,535**

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

The national CSG performance benchmarks are set at 90 per cent of the standard time frames, which are set out in Table 3.4, and relate to the following activities:

> installing new connections in urban, major rural, minor rural and remote areas

> installing in-place connections in all areas

> fault rectifications in urban, rural and remote areas

> appointment-keeping in all areas.

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.

If a CSP fails to meet any of the annual CSG performance benchmarks, the ACMA may take compliance action, including the option to issue the CSP with an infringement notice in certain circumstances. In January 2014, the ACMA issued Telstra with an infringement notice for failing to meet the urban new connections benchmark for the 2012–13 financial year (88.6 per cent performance against a 90 per cent benchmark). Additionally, Telstra was issued with a formal warning as it failed to meet the remote new connections benchmark for 2012–13 (89 per cent performance against a 90 per cent benchmark).

At June 2014, there were 324,091 occasions nationally where customers of the major CSPs waived their rights under the CSG Standard, an increase of 31 per cent since June 2013. At June 2014, iiNet accounted for the majority of waivers (78.7 per cent).

Table 3.4 CSG Standard time frames (working days)

	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.

CSG benchmark performance

Table 3.5 shows CSP performance in 2013–14 in meeting CSG Standard time frames for new service connections and for in-place service connections.

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 3.5 Percentage and number of new service and in-place connections provided within CSG Standard time frames, 2013–14

		New service*				In-place service*
		Urban areas	Major rural areas	Minor rural areas	Remote areas	All areas
iiNet	%	91.9	97.3	95.6	94.7	95.1
	No.	52,638	3,051	1,440	36	74,745
Optus	%	98.0	99.5	96.6	100	n/a
	No.	145,186	185	170	27	n/a
Dodo	%	100	100	100	100	100
	No.	11,942	1,060	659	9	64,868
Primus	%	100	100	100	100	100
	No.	3,875	259	258	4	12,975
Telstra	%	93.7	95.6	95.1	94.3	95.4
	No.	283,964	31,171	15,896	697	286,683

n/a=not applicable.
*Service connections.
Note: Commencing in 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 and fault repairs

Table 3.6 and Table 3.7 show CSP performance in 2013–14 in meeting the CSG Standard for fault repair time frames and appointment-keeping, respectively.

Table 3.6 Percentage and number of faults repaired within CSG Standard time frames and appointment-keeping performance, 2013–14

		Fault repairs			Appointments*
		Urban areas	Rural areas	Remote areas	All areas
iiNet	%	99.6	99.7	100	99.8
	No.	60,014	9,428	80	6,427
Optus	%	94.6	97.9	92.1	98.7
	No.	138,971	285	35	224,685
Dodo	%	100	100	100	100
	No.	26,964	5,246	18	16,415
Primus	%	98.6	98.7	100	100
	No.	27,621	2,761	8	13,083
Telstra	%	92.5	93.1	92.5	96.4
	No.	537,324	161,391	2,375	343,061

*New service connections and fault repairs.
Note: Commencing in 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.

Table 3.7 shows the number of new service and in-place connections, fault repairs and appointments for iiNet, Optus, Primus, Telstra and Dodo over the previous two financial years (2012–13 and 2013–14).

Table 3.7 Number of new service connections, in-place connections and fault repairs requested and appointments made at the national level

	iiNet		Optus		Dodo		Primus		Telstra	
	2012 –13	2013 –14	2012 –13	2013 –14	2012 –13	2013 –14	2012 –13	2013 –14	2012 –13	2013 –14
New service connections	60,232	61,954	165,099	148,525	n/a	13,670	3,223	4,396	336,944	352,947
In-place connections	68,964	78,581	n/a	n/a	n/a	64,868	8,937	12,975	343,274	300,488
Fault repairs	63,436	69,805	163,425	147,310	n/a	32,228	26,001	30,823	933,052	756,478
Appointments*	8,657	6,439	67,214	227,683	n/a	16,415	10,814	13,083	389,972	355,733

n/a=not available.
*New service connections and fault repair.
Note: Dodo was not a qualifying CSP during 2012–13.
Source: CSP data.

CSG Standard payments

As a result of failing to meet CSG Standard time frames during 2013–14, CSPs made compensation payments to customers as shown in Table 3.8.

Table 3.8 Volume and value of compensation payments made by CSPs to customers

	2012–13		2013–14	
	Volume	$ (million)	Volume	$ (million)
iiNet	9,504	0.80	11,740	1.12
Optus	20,767	0.92	19,944	1.10
Primus	1,411	0.03	2,273	0.08
Telstra	143,294	6.14	106,038	5.65
Dodo	n/a	n/a	3,030	0.12
Total	**174,976**	**7.89**	**143,025**	**8.08**

Note: Commencing in 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.

Payments totalled $8.08 million for 2013–14, compared to a total of $7.89 million made during 2012–13—an increase of 2.4 per cent.[1]

Exemptions from the CSG Standard

During periods when circumstances beyond a CSP's control affect its ability to comply with the CSG Standard, the CSP may claim an exemption from compliance with the CSG Standard. Similarly, a CSP may also 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. The numbers of exemptions for the major CSPs for 2013–14 are shown in Table 3.9.

The total number of CSG exemptions claimed for the major CSPs in 2013–14 was 234 exemptions. This is less than the 265 exemptions claimed in 2012–13. The number of services estimated to be affected was also less in 2013–14 (3,252,968 services) compared to 2012–13 (3,977,758 services), and the duration for which CSG exemptions applied decreased in 2013–14 (7,193 days) compared to 2012–13 (8,583 days).

Table 3.9 Numbers of CSG exemptions for the major CSPs, 2013–14

Reason for exemption	iiNet group	Optus	Telstra	M2 Group*
Extreme weather conditions	50	49	50	49
Natural disasters	6	4	6	5
Other	4	3	4	4
Total	**60**	**56**	**60**	**58**

Exemption notifications for Primus, Dodo, Eftel, Commander, aaNet and Engin have been included in M2 Group notifications.
Source: CSP data.

3.5   Network Reliability Framework (NRF)

The ACMA monitors the reliability of Telstra's fixed-line telephone service network under the NRF. The NRF applies only to services Telstra provides to its CSG Standard-eligible customers and Telstra is required to report to the ACMA on the performance of its network and to fix poorly performing cable runs and individual services.

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

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

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

> Level 3—individual service level that 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

Telstra's national performance data is presented in Figure 3.3. Level 1(a) shows the percentage of CSG Standard services that did not experience a fault during the month reported and Level 1(b) shows the percentage of time in a month that CSG Standard services, on average, are available.

Figure 3.3 Telstra's Level 1(a) and 1(b) performance, based on monthly reports
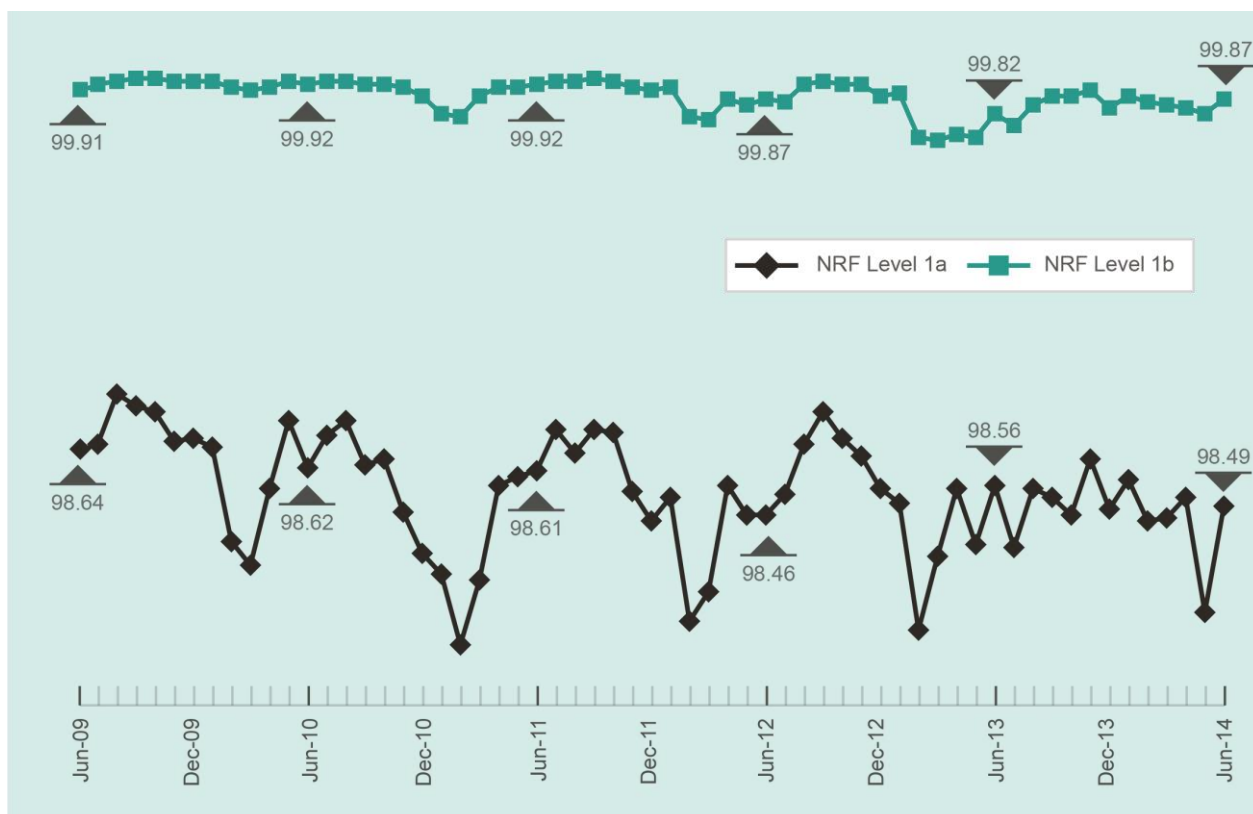
Base: Percentage in each category.
Source: ACMA, Telstra.

Under Level 1(a), FSAs in urban areas experienced a slightly lower percentage of faults than those in non-urban areas. On average, 1.49 per cent of services experienced a fault in any given month in urban areas, while this figure was 1.53 per cent in non-urban areas. Figure 3.3 shows the cyclical nature of NRF Level 1(a) performance. It should be noted that small changes in this figure represent relatively large changes in the number of faults occurring on the network.

Level 1(b) measures the percentage of time in a month that services (on average) are available; that is, not awaiting repair. In 2013–14, services were available, on a monthly average, 99.85 per cent of the time (nationally), whereas in 2012–13 services were available, on a monthly average, 99.84 per cent of the time (nationally).

The ACMA also uses data provided under Level 1 of the NRF to calculate the average time (in hours) for fault-affected CSG Standard services to be repaired for the month (Level 1(c)—Figure 3.4). 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 3.4 Level 1(c)—average time for Telstra to restore fault-affected services (hours)
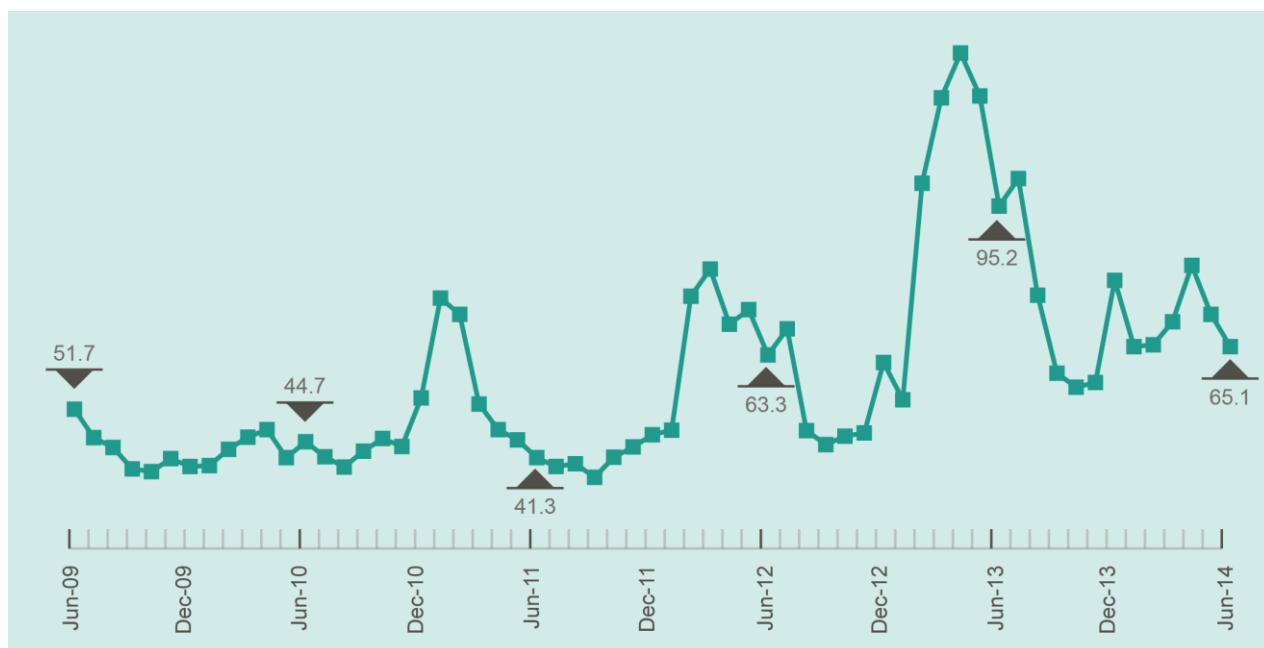
Source: Telstra.

In terms of elapsed time, it took an average of 71 hours to restore services that had a fault in 2013–14 compared to an average of 80 hours in 2012–13. It took an average of 66 hours to restore fault-affected services in urban areas and 72 hours in non-urban areas. This compared to 76 hours to restore fault-affected services in urban areas and 85 hours in non-urban areas in 2012–13.

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 2013–14, Telstra completed remediation and monitoring of 482 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 479 cable runs associated with the reported cable runs, significantly more than in 2012–13 when it remediated an additional 208 cable runs. Telstra estimated that remediation work undertaken as part of Level 2 of the NRF in 2013–14 improved the reliability of 32,238 services compared to the 24,893 services that benefited from remediation under Level 2 of the NRF in 2012–13.

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)) or four faults in a rolling 365-day period (NRF Level 3(b)).

Telstra reports to the ACMA on any services that breach these thresholds, investigates the performance of the service and then undertakes necessary remediation.

Figure 3.5 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.
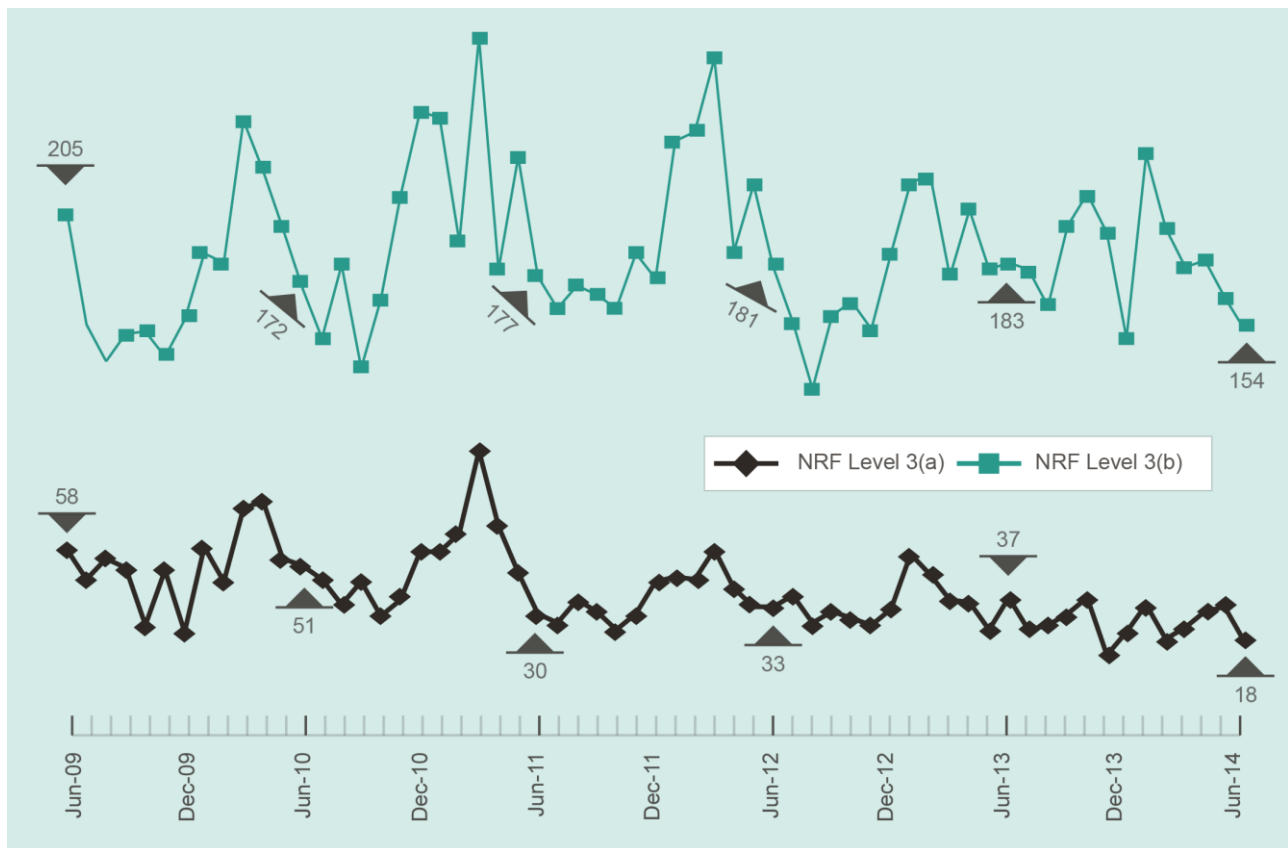
Base: Number of services.
Source: Telstra.

Telstra has reported a decrease in the number of services experiencing breaches of the 60-day threshold, reporting 26 breaches per month (on average) and a total of 308 for the 2013–14 reporting period. In 2012–13, Telstra reported an average of 35 breaches per month and a total of 414 for the year.

Telstra also reported a slight increase in the number of services experiencing breaches of the 365-day threshold, with 185 breaches per month (on average) and a total of 2,217 for 2013–14 compared to 2012–13 (178 breaches per month (on average) and a total of 2,137 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 2013–14, Telstra reported 636 monitoring-period faults (across 558 individual services) and assessed 22 faults as related to the original contravention. This compares to 691 monitoring-period faults (across 589 individual services) reported and 19 faults assessed as related to the original convention in 2012–13.

Additionally, 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 quarterly any services where remediation has not been completed within the expected time frames. In 2013–14, Telstra reported 951 delays to remediation (that is, where remediation was not completed within the expected time frames), with an average reported delay to remediation of 190 days. Some services were reported as experiencing more than one delay.

3.6   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 offers 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.

The number of priority assistance customers is presented in Table 3.10. During 2013–14, the number of priority assistance customers decreased by 20 per cent.

Table 3.10 Number of priority assistance customers, at 30 June

	2010	2011	2012	2013	2014
Provisional	85,587	54,152	91,009	144,435	49,679
Validated	124,875	134,822	130,341	112,114	154,940
Total	**210,462**	**188,974**	**221,350**	**256,549**	**204,619**

Source: Telstra.

Priority assistance customers are given faster connections and fault repairs of their fixed-line telephone service than the connection and fault repair time frames mandated in the CSG Standard. A service must be connected or a fault repaired within 24 hours in urban and rural areas or 48 hours in remote areas. Table 3.11 provides information about the performance of Telstra in meeting priority assistance time frames for connections and fault repairs since 2009–10.

Table 3.11 Telstra Priority assistance—percentage of connection and fault restoration requests completed on time, by financial year

		National		Urban		Rural		Remote	
		%	Volume	%	Volume	%	Volume	%	Volume
Connection requests	2009–10	92	n/a	92	n/a	92	n/a	90	n/a
	2010–11	93	n/a	94	n/a	93	n/a	89	n/a
	2011–12	92	40,881	92	30,618	92	9,970	84	295
	2012–13	93	42,700	93	32,536	93	9,886	89	277
	2013–14	93	34,675	93	26,980	93	7,467	89	222
Fault restoration requests	2009–10	92	n/a	93	n/a	89	n/a	84	n/a
	2010–11	93	n/a	94	n/a	90	n/a	87	n/a
	2011–12	95	130,946	96	95,586	92	34,855	94	469
	2012–13	96	155,378	97	114,800	92	40,045	92	502
	2013–14	95	116,552	96	89,205	92	26,988	91	390

n/a=not available.
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. Volumes completed on time for Telstra are shown for 2011–12 to 2013–14.
Source: Telstra.

3.7   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 2013–14.

3.8   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 2013–14, 821,760 local numbers were ported. This represents an eight per cent increase from the 763,422 numbers ported in 2012–13. Table 3.12 shows there has been a steady increase of local number ports since 2009–10 (615,860).

The C540:2013 *Local Number Portability Code* (LNP Code) sets out carrier/CSP operational procedures for porting local numbers. The LNP Code was revised and registered in December 2013 and came into force on 1 March 2014. Communications Alliance (CA) is continuing to consider LNP arrangements in an NBN environment.

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 the industry. There were 11,088 FLRNs ported during 2013–14, a 15 per cent decrease on the 13,096 FLRNs ported during 2012–13 (Table 3.12).

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 2013–14, there were 1.67 million ports, a decrease of four per cent on the 1.74 million ports completed in 2012–13. Mobile number portability is regulated by the provisions of the C570:2009 Mobile Number Portability Code developed by CA.

Table 3.12 Number portability

Numbers ported	2009–10	2010–11	2011–12	2012–13	2013–14
Local	615,860	702,369	627,160	763,422	821,760
Freephone and local rate	11,529	18,830	12,814	13,096	11,088
Mobile	1,660,873	1,896,016	2,627,350	1,743,485	1,668,163

Source: ACMA and INMS.

3.9   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 3.13 shows that the total number of registered cablers in the industry has increased each year since 30 June 2009.

Table 3.13 Total number of licensed/registered cablers

	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14
Number of cablers	61,904	64,587	65,696	67,637	69,155	71,057

Source: ACMA.

In 2013–14, there were five ACMA-accredited registrars providing registration and other associated services to cablers.

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 2013–14, the ACMA received 46 cabling-related complaints mainly about contraventions of the *Telecommunications Cabling Provider Rules 2000* or alleged unregistered cablers. During the period, the ACMA also conducted 29 cabling inspections. The ACMA issued four warning notices under the Act for unregistered cabling. There were no telecommunications infringement notices issued.

3.10   Do Not Call Register (DNCR)

The DNCR is a secure database that allows people to list their numbers for eight years 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 December 2013, the Department of Communications released a discussion paper seeking public, industry and other interested organisations' views on the optimal period of registration for telephone and fax numbers on the DNCR. Over 1,300 submissions were received, with key stakeholder responses published on the department's website.

In 2013–14, more than 860,000 numbers were added to the DNCR, taking the total amount of numbers listed to over 9.60 million.

To avoid breaching the *Do Not Call Register Act 2006* (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 2013–14, 1,189 telemarketers and fax marketers submitted a total of over 1.11 billion numbers for checking (Figure 3.6).

Figure 3.6 Numbers submitted for checking against the DNCR, (billions)

Year	Value
2013–14	1.11
2012–13	1.25
2011–12	1.19
2010–11	1.12
2009–10	1.08
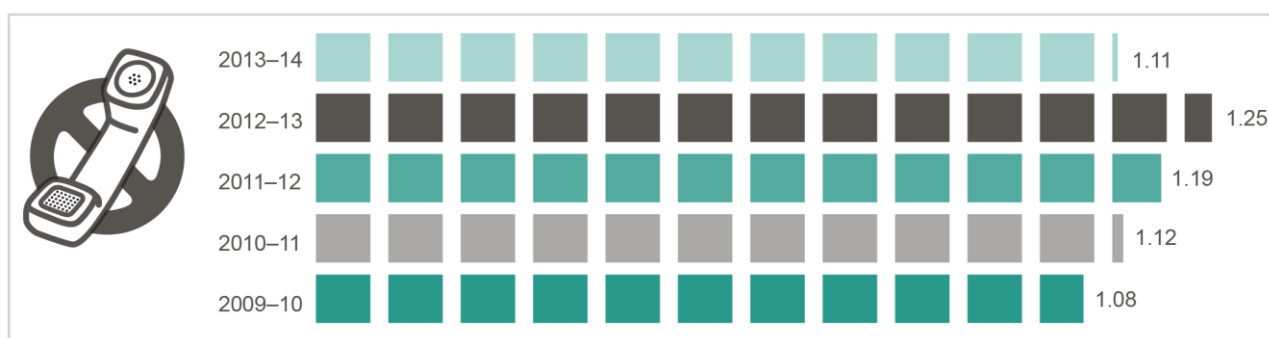
Base: Numbers submitted for checking.
Source: Register operator (Service Stream Solutions Pty Ltd) reports to the ACMA.

3.11 Unsolicited communications—spam and telemarketing

The ACMA is responsible for compliance and enforcement of the DNCR Act, the *Spam Act 2003* (Spam Act), the Telemarketing and Research Industry Standard 2007 and the Fax Marketing Industry Standard 2011. This regulation is designed to minimise the impact on Australians of unsolicited telemarketing, fax marketing and commercial electronic messages including email, SMS, MMS and instant messaging.

The ACMA continued to receive a high number of complaints and reports about businesses telemarketing and e-marketing to Australian consumers in 2013–14. This reflects the high volumes of e-marketing and telemarketing in the economy supported by the relative cost effectiveness of these marketing channels. The growth in the use of VoIP allows phone calls, including telemarketing calls, to be made from virtually anywhere in the world at little or no cost. E-marketing and online activities have also been surging across most industry sectors both domestically and overseas.

Table 3.14 below shows that in 2013–14, the ACMA received a total of 368,441 complaints and reports from Australians about unsolicited communications, a decline of 13.5 per cent from the previous year. While the number of telemarketing and spam email complaints have increased (4.6 and 16.3 per cent, respectively), the number of spam email and SMS reports has declined (–14.7 and –35.8 per cent respectively).

Table 3.14 Summary of complaints, enquiries, compliance activities and enforcement

		2012–13	2013–14	% change
Consumer complaints	*Telemarketing complaints*			
	Telemarketing	19,335	20,232	+4.6
	Fax marketing	342	230	−32.7
	Spam complaints			
	Email reports	395,957	337,730	−14.7
	Email complaints	935	1,087	+16.3
	SMS reports	13,796	8,862	−35.8
	SMS complaints	311	300	−3.5
	Total	**430,676**	**368,441**	**−13.5**
Enquiries	*Telemarketing*	10,927	11,335	+3.7
	Spam	1,726	1,340	−22.4
	Total	**12,653**	**12,675**	**+0.2**
Business compliance	*Telemarketing*			
	Advisory letters	918	951	+3.6
	Informal warnings	139	116	−16.5
	Repeat contact required	n/a	8%	n/a
	Spam			
	Informal warnings	7,105	5,002	*
	Repeat contact required	n/a	12%	n/a
	Total	**8,162**	**6,069**	**−25.6**
Investigations	*Telemarketing*	11	6	−45.5
	Spam	10	10	0.0
	Total	**21**	**16**	**−23.8**

n/a=not available.
*Total number of informal warnings issued are impacted because of system issues and cannot be directly compared to previous year.
Source: ACMA.

Complaints and reports from Australian consumers about unsolicited communications are used by the ACMA to identify businesses that may be in breach of the legislation. In addressing business non-compliance, the ACMA takes a graduated approach that focuses on educating, advising or informally warning businesses in potential breach of the legislation in the first instance. Of the businesses contacted following a complaint or report by the ACMA in 2013–14, only eight to 12 per cent were a repeat contact. This suggests the vast majority of businesses address compliance issues and correct non-compliant behaviour after initial contact during the advisory or informal warning stage.

It is usually only where an informal approach has failed that the ACMA escalates businesses to be considered for investigation. During 2013–14, the ACMA finalised 16 formal investigations into business non-compliance with the DNCR Act and Spam Act. As a result of these investigations, the ACMA accepted three enforceable undertakings, gave four infringement notices and issued seven formal warnings.

3.12   Cybersecurity

Computers that have been infected with malicious software (malware) are often unwittingly part of a botnet—a network of compromised computing devices that can be controlled remotely for illegal and harmful activities. These purposes include disseminating spam, click fraud and distributed denial-of-service attacks on internet infrastructure.

The ACMA's Australian Internet Security Initiative (AISI) program provides daily reports to AISI participants—Australian ISPs and universities—about malware-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 2014, there were 139 participants in the AISI, with these participants covering around 98 per cent of allocated Australian IP address ranges. A total of 8.52 million infections were reported to AISI participants up until 27 May 2014 averaging 25,839 per day for 2013–14 compared to an average of 16,034 per day in 2012–13, an increase of 61 per cent.

On 27 May 2014, the data and reporting methodology for the AISI changed. AISI participants are now provided with enhanced information about all observed infections on their networks. Statistically, this new data is not comparable to the dataset previously provided to participants. However, between 28 May and 30 June 2014, 1.66 million observations of infections were reported to AISI members.

The AISI is complemented by the iCode, which commenced operating on 1 December 2010, and is designed to provide a consistent approach for Australian ISPs to help inform, educate and protect their customers against cybersecurity risks. The AISI is specified in the iCode as one of the methods that ISPs should use to detect malware infections in their networks.

A further cybersecurity activity of the ACMA is an automated system for reporting suspected 'phishing' URLs extracted from spam emails reported to the ACMA. Phishing emails direct internet users to fraudulent web pages 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. A total of 46,393 reports of suspected phishing URLs were provided to these organisations in 2013–14. To enable quick and early action, phishing reports are provided within minutes of being received by the ACMA.

In October 2013, the ACMA released its report on malware that identified that about 10 per cent of home-based users do not have any protective software to protect their computing devices against malware while another 8 per cent of users do not update their software. The ACMA research report, *Malware and harmful software: Consumers views on software threats and use of protections*, is part of the ACMA's ongoing program of research into key areas of the internet economy and emerging digital trends.

3.13 Telecommunications codes—development and review

Under Part 6 of the Act, the ACMA may register codes developed by industry bodies. At 30 June 2014, 22 codes were registered, comprising:

> 19 codes developed by CA

> the Cabling Requirements for Business Code, developed by the Cabling Industry Committee

> the Internet Industry Spam Code of Practice, developed by the Internet Industry Association with the Western Australian and South Australian internet associations.

In 2013–14:

> the C540:2013 *Local Number Portability Industry Code* was registered on 16 December 2013

> CA commenced reviews of the Telecommunications Consumer Protections (TCP) Code and the Mobile Premium Services (MPS) Code

> the ACMA de-registered the Australian eMarketing Code of Practice March 2005 following a public consultation process.

3.14 Industry compliance with telecommunications codes

Compliance with the TCP Code

Telecommunications companies demonstrated high levels of compliance with the TCP Code across a range of audits and investigations. For the period 1 July 2013 to 30 June 2014:

> 100 per cent of advertising reviewed was compliant with the TCP Code, an improvement from the 59 per cent of ads that were compliant in 2012–13

> compliance with Critical Information Summary requirements improved from 24 per cent in the previous year to 90 per cent

> Communications Compliance (CommCom) began its work as a self-regulatory body to encourage compliance with the TCP Code. CommCom was created as an outcome of the review of the TCP Code 2012, and requires providers to promote code awareness, lodge annual compliance documents, and prepare and maintain a Compliance Plan. Under the TCP Code, companies providing services to consumers must submit compliance statements to CommCom by 1 April each year. In 2013–14, 224 providers submitted code compliance statements to CommCom, a positive start to the work of this new self-regulatory industry initiative.

For the period 1 July 2013 to 30 June 2014, seven telecommunications companies received directions to comply with the TCP code. These were issued to:

> Lime Telecom Pty Ltd—for failing to provide adequate Critical Information Summaries

> Bytecard Pty Ltd, Clear Networks Pty Ltd, iTalk Australia Pty Ltd and Sure Telecom—for failing to comply with requirements to provide compliance statements to CommCom in 2013

> Gazal Telecom and Utel Networks Pty Ltd—for failing to comply with sales practice and customer transfer provisions.

In addition, 104 formal warnings were issued to:

> Skink Marketing Pty Ltd t/a Woolworths prepaid calling card—for inadequate Critical Information Summaries

> Lime Telecom Pty Ltd—for inadequate Critical Information Summaries

> Live Connected Pty Ltd—for failing to comply with billing and credit management provisions

> Optus Mobile Pty Ltd—for failing to demonstrate billing accuracy and failing to identify and address systemic problems as soon as practicable

> Lycamobile—for failing to demonstrate billing accuracy

> Telstra—for failing to demonstrate billing accuracy

> Dodo Services Pty Ltd—for failing to comply with usage notification requirements

> Telcomo—for failing to comply with sales practice and customer transfer provisions

> Telco Service Holdings Pty Ltd—for failing to keep customer personal information secure
> 95 providers following referrals from CommCom for failing to lodge compliance statements.

Telstra paid an infringement notice for failing to keep customer personal information protected following a direction to comply with this requirement.

3.15 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.

From 1 July 2013 to 30 June 2014, the TIO referred sixteen companies that had not joined the TIO scheme to the ACMA. Of these companies, six joined the TIO scheme, one required no further action, and one resulted in the provider being issued with a direction to join the TIO scheme. The other eight referrals, received late in the reporting period, remain the subject of ACMA inquiries/investigations.

Following a referral from the TIO in September 2013, the ACMA commenced an investigation into a provider who had failed to comply with the TIO scheme. The ACMA's investigation found that the provider had failed to comply with a determination made by the TIO and had therefore failed to comply with the TIO scheme, the TCPSS Act, and subsequently the service provider rules set out at clause 1 of Schedule 2 to the Telecommunications Act. The ACMA issued the provider with a direction to comply with the TIO scheme and this was complied with.

3.16 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.

There were 138,946 new complaints made to the TIO during 2013–14, down by 12.4 per cent from 2012–13. The most significant decrease in complaints was for mobile services (down 21 per cent), which may reflect the impact of the new TCP Code (registered on 1 September 2012) 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 (see Figures 3.7 and 3.8).

Figure 3.7 Annual TIO new complaints by service type

Mobile phone | Fixed-line | Internet

112,375 | 122,834 | 91,331
74,227 | | 71,950

46,859 | 46,040 | 37,425 | 33,940 | 34,280
42,685 | 37,092 | 30,856 | 31,431 | 31,148

2009–10 | 2010–11 | 2011–12 | 2012–13 | 2013–14
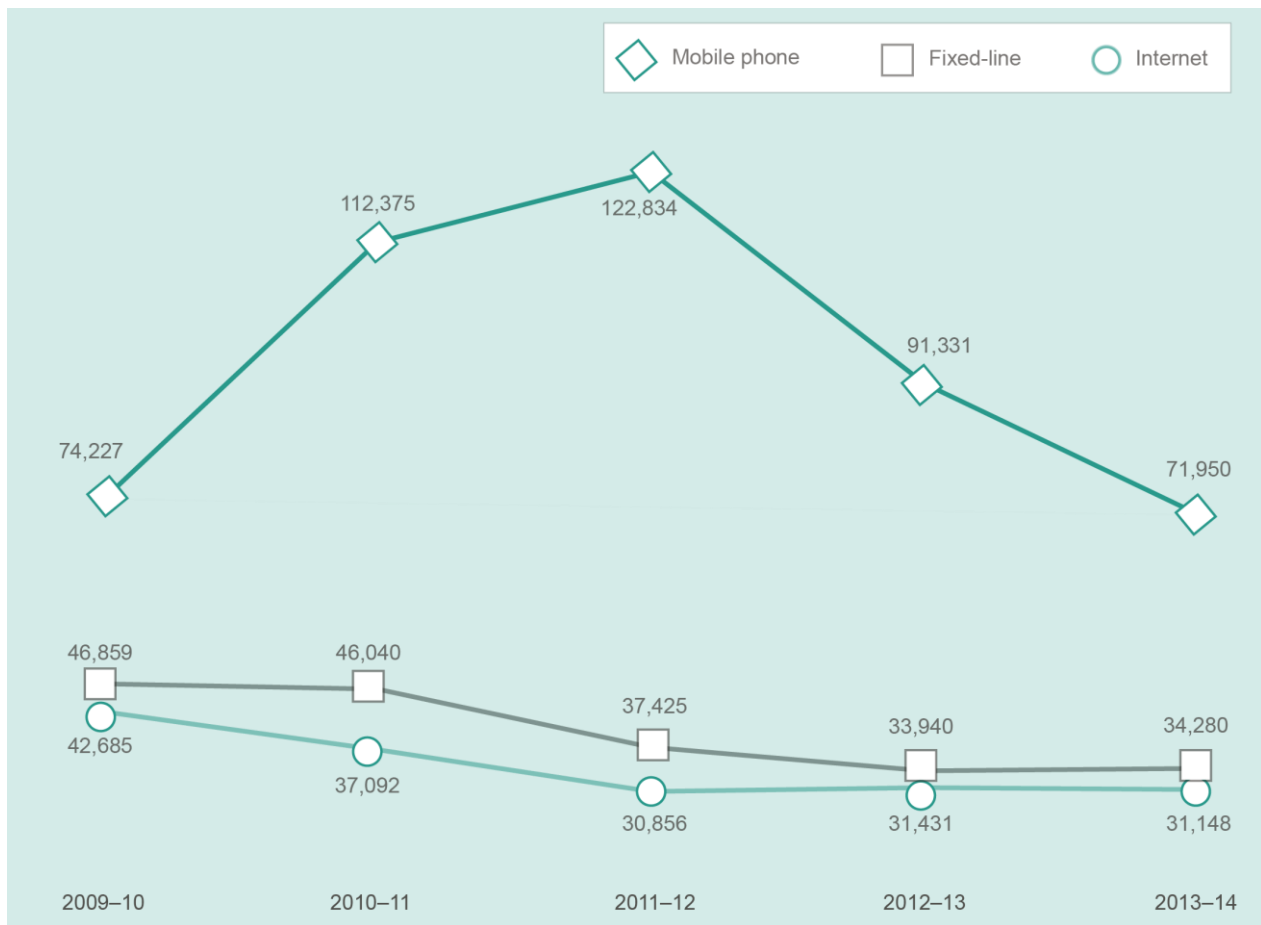
Figure 3.8 Annual TIO new complaints on mobile premium services

4,001
2,174
2,587
1.950
1,568

2009–10 | 2010–11 | 2011–12 | 2012–13 | 2013–14
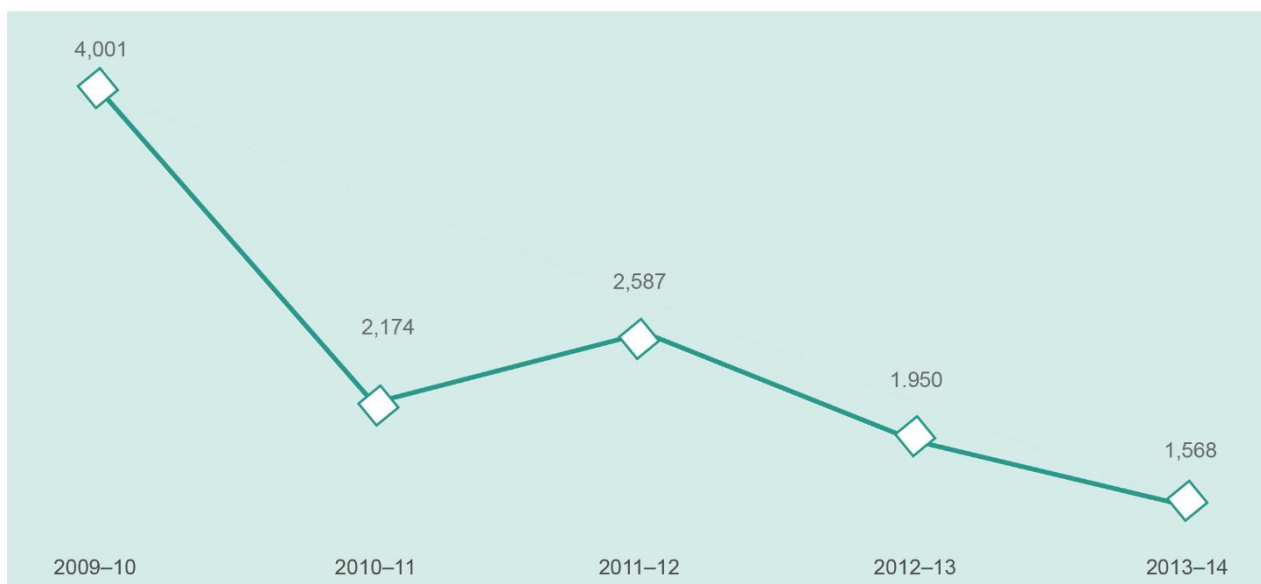
Table 3.15 shows the top five TIO new complaint issues for the last two financial years. The number of complaint issues in each category has fallen in 2013–14.

Table 3.15 Top five TIO new complaint issues

		2012–13	2013–14	% change
Complaint issue category	Customer service	94,639	75,033	–21
	Billing and payments	78,160	76,587	–2
	Faults	75,325	54,055	–28
	Complaints-handling	50,504	46,469	–8
	Credit management	46,138	40,040	–13

Source: TIO.

3.17 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 395 complaints (not including enquiries)—a 21 per cent increase from the 2012–13 reporting period. Of complaints received by the TIO during 2013–14:

> 232 were from owners/occupiers of land about alleged damage to property by the provider

> 80 were from owners/occupiers of land about carriers billing them for repairing damage to infrastructure allegedly caused by the owner/occupier

> 17 related to the standard of service from providers when installing subscriber connections

> 32 related to the failure of a carrier to give notice to the landowner or occupier

> 25 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 3.9 Facility installation complaints received by the ACMA and the TIO
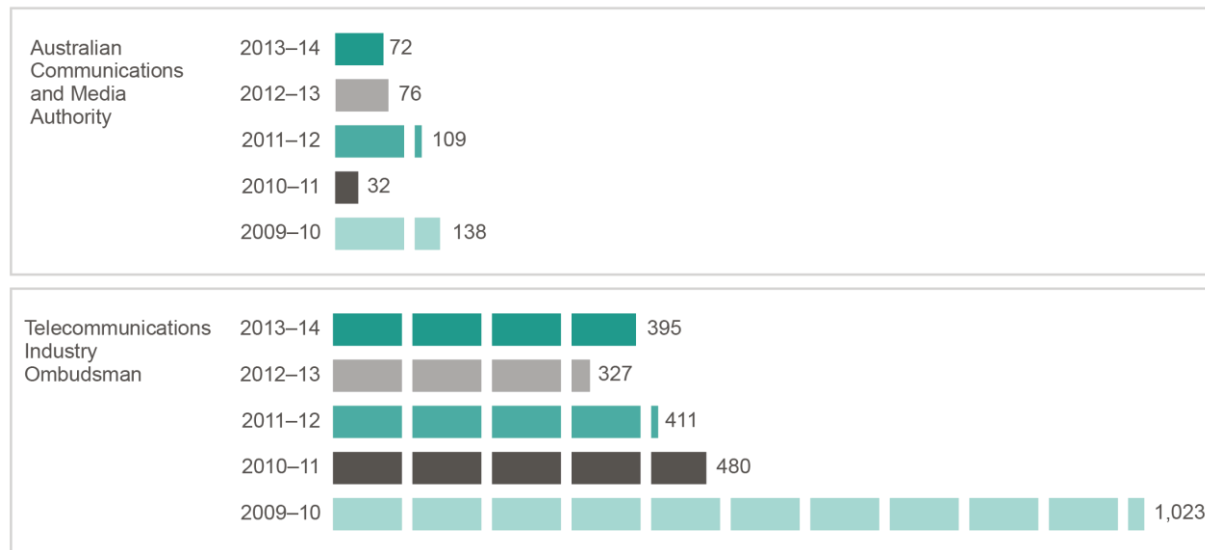
Source: ACMA and TIO.

3.18   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 communications facilities. This information is available at www.rfnsa.com.au.

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 72 enquiries and no complaints about matters covered by Schedule 3 of the Act and the Telecommunications Code of Practice 1997. The ACMA also received two complaints and 23 enquiries related to the industry code. The carriers undertook a total of 3,447 consultations during this period.

Endnotes

1 Compensation payments for 2012–13 did not include data for Dodo.

Chapter 4
Broadcasting and online content industry regulatory performance

4.1 Overview

Broadcasting legislation, program standards and licence conditions determine the regulatory obligations of commercial radio and television broadcasters in Australia. This chapter 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 outcomes relating to broadcasting compliance in the reporting period included:

> all major metropolitan free-to-air commercial network licensees meeting the Australian content transmission quotas for overall content, drama and documentaries
> all commercial and national television broadcasters complying with their quota requirements for High Definition Television (HDTV) transmission
> all regional commercial radio and television broadcasting licensees broadcasting the required amount of material of local significance
> completion of the switchover from analog to digital television broadcasting across Australia
> an increase of nearly 550 per cent in the number of items of online child abuse and other illegal material referred to law enforcement agencies.

4.2 Broadcasting in Australia

Setting the scene—Australians use of traditional broadcasting services
Traditional television and radio services remain integral to Australian life. During the reporting period, 93 per cent of adults (people aged 18 years and over) said they had watched pay TV or free-to-air television in the last seven days and 85 per cent said they had listened to commercial or community radio in the last seven days. The use of these services has remained relatively stable over the past five years (Figure 4.1).

Figure 4.1 Use of TV and radio
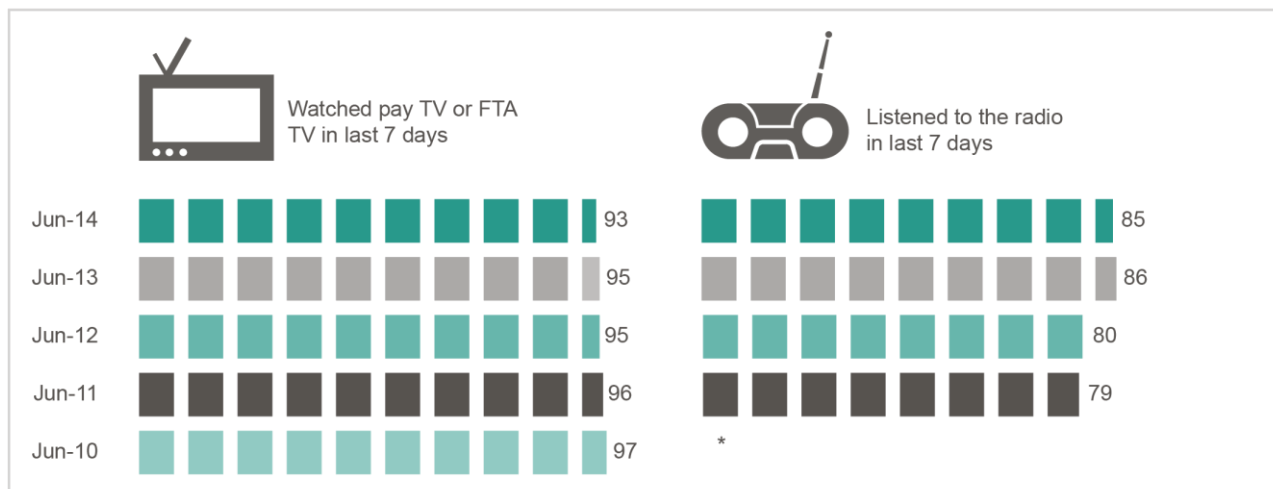
*Data not available.
Base: Percentage of Australians aged 18 years and over in an average seven-day period to June of each year.
Source: Roy Morgan Single Source.

Emerging professional online video content services

While Australians continue to access traditional content services, there is growing demand for more flexible ways of accessing video and audio services. In the six months to May 2014, half (51 per cent) of adult Australian internet users had streamed professionally produced video or audio content and 47 per cent had downloaded video and audio content. More specifically:

> 42 per cent watched catch-up TV online for free using free-to-air services such as Network 10 Catch-up, ABC iView or Plus 7

> 34 per cent streamed internet entertainment services such as Spotify (commercial music streaming service), Pandora (free 'personalised' internet radio), SBS on Demand or ABC iView

> 13 per cent paid to watch video on demand online via services such as Quickflix or Foxtel on Demand

> nine per cent watched commercial internet television, also known as IPTV, using services including Fetch TV or Apple TV.

4.3   Australian content on television

The BSA and the Broadcasting Services (Australian Content) Standard 2005 (Australian Content Standard) stipulates Australian content quotas for commercial television. Under the BSA, commercial television broadcasters must provide:

> 55 per cent Australian content, between 6.00 am and midnight across the year, on their core/primary broadcasting service

> a minimum level of Australian programming on television broadcasting services other than their core/primary broadcasting service (multi-channels). For 2013, this requirement is 730 hours, increasing to 1,460 hours in 2015 and beyond.

The Australian Content Standard requires commercial television broadcasters to:

> 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 programs.

The major metropolitan free-to-air commercial network licensees all met the Australian content transmission quotas for overall content, drama and documentaries for the 2013 period (Table 4.1). Assessment for these quota requirements are calendar-year based. 2013 also marked the completion of a latest triennial period for Australian first-release drama.

Table 4.1 Major metropolitan free-to-air commercial network licensee requirements of the Australian Content Standard for the 2013 calendar year

			Minimum quota*	Licensees		
				Seven Network	Nine Network	Ten Network
Overall Australian content	**On primary/ core channel**	(%)	55	69	65	59
	On non-primary/ non-core channel	(average hours)	730	2,393	1,936	2,366
Australian drama	**2013**	(points)	250	350	332	344
	Triennial	(points)	860	911	876	870
	Australian documentaries	(average hours)	20	60	20	33

Minimum transmission quota required to meet the Australian Content Standard.
Note: Overall Australian content relates to first release and repeat programs that must be broadcast between 6.00 am and midnight. Licensee requirements for each network are calculated by averaging across the following locations: Seven Network–five mainland state capital cities, Nine Network–Brisbane, Melbourne and Sydney, Ten Network–five mainland capital cities.
Australian drama and Australian documentaries relates to first-release programs only.

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 2013 calendar year, all Seven Network and Network Ten metropolitan free-to-air commercial television broadcasting licensees met all of these annual quotas. However, three licensees of the Nine Network failed to provide sufficient children's C programming to satisfy annual first-release C programming and annual C programming requirements (Table 4.2). Remedial action for the non-compliant licensees was yet to be finalised at time of publication.

Table 4.2 Major metropolitan free-to-air commercial network licensees children's and preschool children's program quotas (total annual hours), 2013 calendar year

		Minimum annual requirement (hours)	Licensees		
			Seven Network	Nine Network	Ten Network
Australian children's C drama	First release	25	27	27.5	34
	Repeat	8	104	99	65
Australian children's C programs	First release including C drama	130	130	124	130
Children's C programs	All	260	261.5	258.5	260.5
Australian preschool P programs	All	130	130.5	130.5	130.5

Note: Licensee requirements for each network are calculated by averaging across the following locations: Seven Network–five mainland state capital cities, Nine Network–Brisbane, Melbourne and Sydney, Ten Network–five mainland capital cities.
Source: 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.[1] If the 10 per cent expenditure requirement is not met in the relevant 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.

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.

For the 2012–13[2] compliance period, five licensees and eight channel providers supplied 33 eligible drama channels. All participants met their expenditure obligations for 2012–13, reporting an expenditure on new eligible Australian drama of $13.7 million (aggregated). Of that expenditure, $6.41 million was nominated to acquit the expenditure shortfall for 2011–12. For 2013–14, licensees and channel providers must spend a minimum of $25.76 million (in total) on new eligible programs to acquit the remaining 2012–13 obligation.

Australian advertising

Advertisements are classified as Australian or foreign by Commercials Advice Pty Ltd, (CAD), which is wholly owned by Free TV Australia. As part of reducing the regulatory burden on industry, from 2014 the ACMA no longer requests that licensees report this information to the ACMA.

Captioning

During 2012–13[3], television service providers reported a high level of compliance with annual captioning target requirements introduced in the BSA.

All free-to-air commercial television broadcasting services (72) and national television broadcasting services (ABC and SBS services in 20 coverage areas) complied with their annual captioning target requirements, broadcasting a total of 528,401 hours of captioned television programs in 2012–13 (6.00 am to midnight). This comprises 93 per cent of the programming broadcast.

Ninety-nine per cent of subscription television licensees (661 out of 667) met their annual captioning target requirements. During the year, there were captioning services on 394 subscription television services (or 80 distinct subscription television channels, as the same channels provided by different licensees are regarded as different services under the captioning legislation).

Television service providers also reported instances when they failed to meet captioning obligations during 2012–13. During this first year for licensees and broadcasters to comply with the new captioning requirements (2012–13), the ACMA sought to inform and educate television service providers about their compliance obligations. This approach is consistent with the ACMA's stance towards the implementation of other new broadcasting regulations. Table 4.3 provides a summary of the self-reported breaches, excluding disregarded breaches (breaches resulting from unforeseen technical difficulties were disregarded as provided by the captioning legislation).

Table 4.3 Captioning obligations

Captioning obligations	Number of services in breach	Description of obligations in 2012–13
Free-to-air	Services	
Annual captioning target	0	90% captioning between 6.00 am and midnight across the year, with exceptions*
Emergency warnings	0	Transmit emergency warnings in text and speech and if practicable, with captioning
Designated viewing hours	53	Caption all programming between 6.00 pm and 10.30 pm each day (designated viewing hours) on main service
News and current affairs	54	Caption all news and current affairs outside designated viewing hours on main service
Multi-channel	17	Caption repeated programs on a multi-channel if those programs have previously been broadcast with captioning on the broadcaster's main service in the licence or coverage area
Subscription	Services/channels	
Annual captioning target	6 services/ channels	5–60% captioning across the year depending on service category, with exceptions*
Emergency warnings	0	Transmit emergency warnings in text and speech and if practicable, with captioning
Simulcast programming	5 services/ 1 distinct channel	Caption simulcast programs on the second service if the programs are simultaneously transmitted with captions on the first service
Repeat programming	44 services/ 9 distinct channels	Caption programs that have previously been transmitted with captions and then repeated on the same or another subscription television service provided by the licensee

Captioning obligations do not apply to exempt programs, which include foreign programs (not wholly in English) and music programs that do not contain any human vocal content. In 2012–13, three commercial broadcasters had a reduced annual target of 80 per cent as a result of target reduction orders (unjustifiable hardship).Some subscription services were exempt from the annual captioning target as a result of exemption orders (unjustifiable hardship) and nominations under section 130ZX of the BSA (a transitional measure that allows exemption of certain services if the licensee has met the annual captioning target for the threshold number of services). Source: ACMA.

4.4　Notification of changes in control

Commercial television licensees, commercial 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).

During 2013–14, no infringement notices were given for late notifications of changes of control. Two formal warnings were given, relating to events that took place in the previous financial year.

Fifteen events affecting the control of media operations occurred during 2013–14.

For the fifth consecutive year, 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).

4.5   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 21 July 2013 to 1 February 2014, all regional broadcasting licensees in Queensland, New South Wales, Victoria and Tasmania reported that they met the weekly and six-weekly minimum quota requirements of 90 points and 720 points respectively.

In June 2013, the ACMA was directed by the then Minister for Broadband, Communications and the Digital Economy to review the operation and effectiveness of the current regulatory arrangements for the provision of local content in certain regional commercial television areas. The *Regional Commercial Television Local Content Investigation 2013* (the investigation[4]) was completed on 24 December 2013 and the investigation report was sent to the Minister for Communications on 6 January 2014. Key investigation findings included that:

> Local content is important and valued by regional Australians.

> Regional Australians are largely satisfied with the current levels of local content available.

> Regional Australians access local content across a wide variety of sources.

> Television is the source most used by regional Australians for news and is the preferred source for local news. However, with some exceptions, the audience for commercial television local news bulletins is declining.

> There are commercial incentives for some regional broadcasters to provide local content.

> Providing local content on commercial television is a high-cost activity and is not necessarily profitable in all markets.

> Funding pressures affecting regional broadcasters are likely to continue.

The investigation report can be accessed at www.acma.gov.au/theACMA/Consultations/ Consultations/Completed/regional-television-local-content-investigation.

4.6 Local content, presence and information on regional commercial radio

The Broadcasting Services (Regional Commercial Radio—Material of Local Significance) Licence Condition 2012 requires 211[5] regional commercial radio licensees to broadcast prescribed amounts of material of local significance (local content) between 5.00 am and 8.00 pm on business days. Licensees are exempt from this obligation for a five-week 'holiday' period each year.

According to the annual returns for 2012–13[6], all licensees broadcast the prescribed amount of local content as required by the licence condition.

A regional commercial radio licensee affected by certain changes in ownership or control (known as a 'trigger event') is required to:

> broadcast specified amounts of local news and information for 47 weeks per year (minimum service standards)

> maintain existing levels of local presence (local staff and facilities) for 24 months from the date of the trigger event.[7]

According to the annual returns for 2012–13, trigger event-affected licensees maintained a high level of compliance with their local content plans. Of the 95 trigger event-affected licensees reporting to the ACMA, all but two licensees complied with their approved local content plan.

On 16 April 2014, the 24-month local presence compliance period ceased for 88 regional commercial radio licences affected by trigger events.

4.7 Anti-siphoning provisions

The anti-siphoning scheme in the BSA restricts subscription broadcasters from acquiring anti-siphoning events in certain instances and also restricts the broadcast of anti-siphoning events by free-to-air broadcasters on their digital multi-channels.

In the reporting period, the ACMA investigated one commercial television licensee's compliance with the licence condition restricting the broadcast of anti-siphoning events. The ACMA found the licensee breached the licence condition by broadcasting Game 1 of the 2014 National Rugby League State of Origin series on a HD multi-channel without simulcasting the event on the primary channel in the Perth TV1 licence area.

4.8 Digital broadcasting

Digitalisation of Australian broadcasting services included 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. The switchover from analog to digital television broadcasting was completed across Australia on 10 December 2013.

Digital television

Following the initial switch-off of analog services in the Mildura and Sunraysia licence area in Victoria on 30 June 2010, switchover continued in stages across the remainder of Australia. During the 2013–14 reporting period, switchover was completed—final areas switching over from analog to digital television are outlined in Figure 4.2.

Figure 4.2 Switchover dates in 2013–14

Darwin
30 July 2013

Remote Central and
Eastern Australia
10 December 2013

Sydney
including Gosford
3 December 2013

Melbourne
10 December 2013
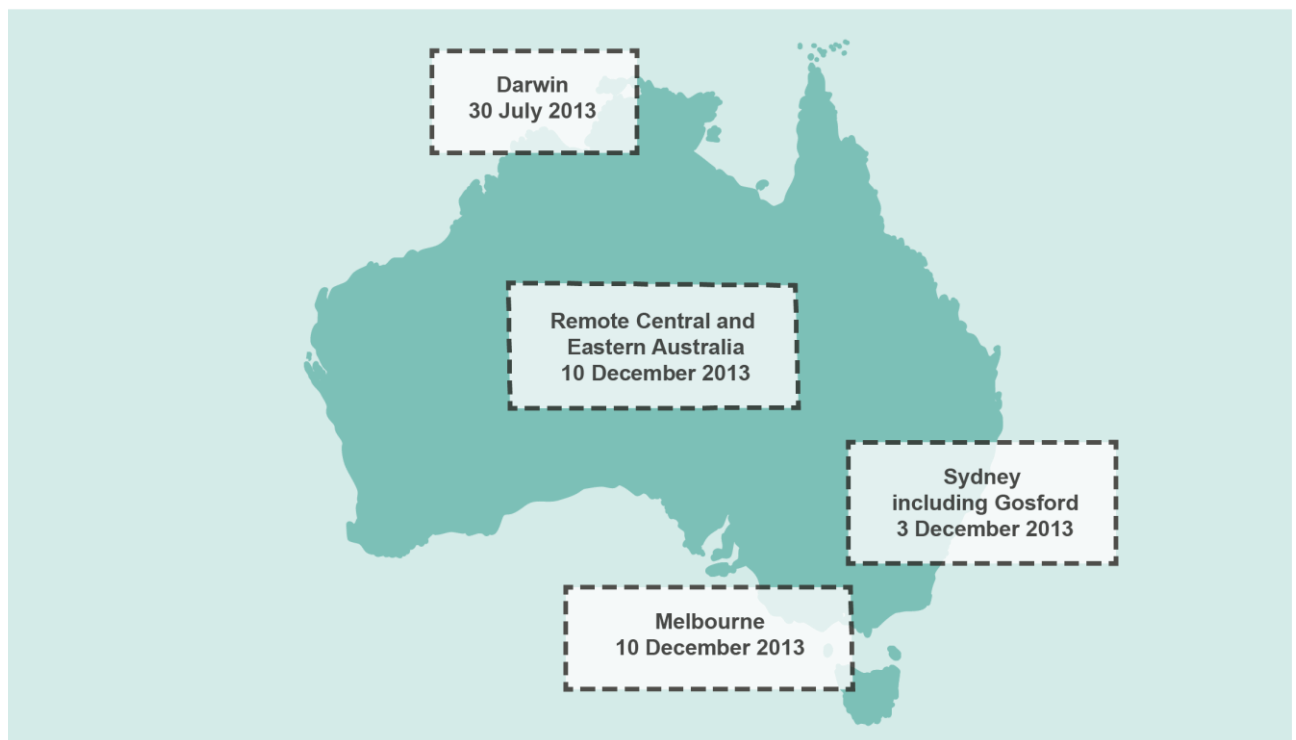
Source: ACMA.

High definition broadcasting

Commercial television broadcasting licensees and national broadcasters were required to meet a HDTV quota until the end of the simulcast period (analog switch-off) (Part 4 of Schedule 4 to the BSA). During this pre switch-off era, each commercial and national television broadcasting service in a mainland metropolitan area was required to transmit a minimum quota of 1,040 hours of HDTV programming per calendar year. The HDTV obligations also applied to a number of broadcasters in regional areas. Following the successful completion of analog switch-off in December 2013, the HDTV quota requirements are no longer applicable.

Digital radio

Digital radio services, using DAB+ technology in VHF Band III spectrum, have been running on a permanent basis in the metropolitan areas of Adelaide, Brisbane, Melbourne, Perth and Sydney since July 2009.

As at August 2014, there were over 2.8 million people listening to digital radio each week in Sydney, Melbourne, Brisbane, Perth and Adelaide. This compared with nearly 1.6 million listeners in the same period in 2013. The number of digital radios sold has also increased to 1.6 million at June 2014, from 1.3 million at June 2013.

In October 2013, the foundation digital radio multiplex transmitter licences were varied to authorise the operation of in-fill transmitters in 14 locations in Sydney, Melbourne, Brisbane and Perth, extending digital radio coverage to a potential 264,000 listeners.

Trials of DAB+ are being conducted in Canberra and Darwin by the peak commercial radio body, Commercial Radio Australia. The current trials expire on 30 June 2015.

Various technological and policy issues need to be resolved before planning and licensing for the rollout of digital radio to regional licence areas can commence, including determining the most appropriate digital radio transmission technology for regional licence areas.

The government is currently conducting two statutory reviews into digital radio services, in accordance with section 215B of the BSA and 313B of the *Radiocommunications Act 1992* that consider the regulatory regime and technologies for digital radio.

4.9   Broadcasting complaints and investigations

The ACMA monitors 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 1,593 written complaints and enquiries made to the ACMA about broadcasting matters during 2013–14, a 27 per cent decrease from 2012–13. The number of investigations completed in 2013–14 was 180 (Table 4.4).

Table 4.4 ACMA broadcasting complaints and investigations by financial year

	2009–10	2010–11	2011–12	2012–13	2013–14
Written complaints and enquiries received	1,676	1,512	2,273	2,178†	1,593
Investigations completed	189	197	231	212	180‡
Investigations resulting in a breach finding*	74	72	71	67	45
Investigations resulting in a non-breach finding*	111	115	155	135	132

Investigations against a code of practice, licence condition, standard and/or provision of the Broadcasting Services Act 1992.
†*This does not include 2,680 complaints and enquiries received about 2DAY's* Summer 30 *program broadcast on 4 December 2012.*
‡*Two investigations resulted in no findings and a third investigation was concluded.*
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.

4.10   Investigating complaints about online content

The Online Content 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 assessed by the ACMA as likely to be prohibited, is termed 'potential prohibited' content under the BSA.[8]

During 2013–14, the ACMA received 4,051 complaints (compared to 4,633 during 2012–13) and finalised investigations into 11,164 items of content as at 30 June 2014 (a complaint may result in the investigation of multiple items of content). The introduction of new software and processes facilitated the investigation of a much greater number of items of child sexual abuse material with 8,981 individual items being assessed as prohibited or potential prohibited online content. Of these, approximately 88 per cent of online content items actioned were assessed and/or classified as RC.

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 (PC-based) industry accredited filters. These filters have been tested and accredited by the Internet Industry Association (whose functions have now been subsumed by Communications Alliance), as part of the Family Friendly Filter scheme, in accordance with the Internet and Mobile Content Code.

During 2013–14, a total of 8,980 overseas-hosted prohibited or potential prohibited items were referred to suppliers of optional end-user industry-accredited filters (Table 4.5). The ACMA also issued one final 'take-down' notice for an item of Australian-hosted prohibited content. The ISP issued with a notice removed the content within the required time frame, maintaining 100 per cent compliance with 'take-down' notices across the life of the Online Content Scheme.

Table 4.5 Internet content investigations by financial year

	2009–10	2010–11	2011–12	2012–13	2013–14	% change from 2012–13 to 2013–14
Complaints						
Received*	3,212	4,865	5,026	4,633	4,051	–13
Invalid†	118	217	329	115	50	–57
Investigations						
Terminated‡	175	174	210	556	578	+4
Completed§	2,782	3,994	5,403	3,143	10,586	+237
Total items‖ investigated	**3,828**	**6,587**	**6,265**	**3,793**	**11,164**	**+194**
Action taken						
Items actioned# (hosted in, or provided from, Australia)	25	12	7	8**	1	–88
Items actioned (overseas-hosted)	1,907	1,945	2,004	1,845	8,980	+387
Items of online child abuse and other illegal material referred to law enforcement	1,092	1,071	1,130	1,182	7,670	+549

*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.

†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 investigation may be terminated if the ACMA is of the opinion that is does not have sufficient information to conclude the investigation.

§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 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 child sexual abuse material. 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. INHOPE acts as a rapid law enforcement notification and take-down channel across international borders. In 2013–14, the ACMA referred 7,670 items of online child abuse and other illegal material to law enforcement agencies, nearly a 550 per cent increase on the previous year—7,540 items of child sexual abuse material were notified through INHOPE for take-down. The increase is a result of a rising number of complaints to the ACMA, coupled with the ACMA's commitment to pursuing the removal of such material.
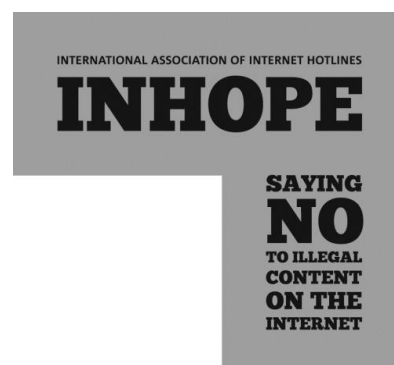
4.11   Interactive gambling

The *Interactive Gambling Act 2001* (IGA) prohibits certain internet gambling content, as well as the advertising of such content. IGA complaints received and actioned by the ACMA in the reporting period are outlined in Table 4.6. Under the IGA, the ACMA must not investigate Australian-hosted content, but if it is warranted to do so, must refer complaints to an Australian police force for investigation. The total number of complaints and enquiries received by the ACMA during 2013–14 was 121, which was the same as received in 2012–13.

Table 4.6 Interactive gambling

Interactive gambling	2013–14
Complaints and general enquiries	**121**
Investigations of overseas-hosted gambling content	23
Prohibited internet gambling content found to be in breach of the IGA, notified to accredited filter providers and the AFP	11
Assessments of Australian-hosted gambling content	25
Potential prohibited content referred to the AFP	10
Investigations into the broadcast of interactive gambling advertisements[*]	0

Under the IGA, the ACMA only investigates interactive gambling advertisements that are broadcast on television or radio. The Department of Communications takes responsibility for all other advertising, such as online or in print.

Endnotes

[1] While the scheme imposes a spending obligation on licensees and channel providers for Australian and New Zealand programs, there is no broadcasting requirement.

[2] This is the most recent available data at time of publication.

[3] As above.

[4] The investigation drew from a number of sources including a survey of regional Australian audience rating data, local content case studies, a peer-reviewed economic analysis and consultation process involving both the public and the regional broadcasting industry.

[5] This number excludes regional commercial radio broadcasting services licensed under section 40 of the BSA, regional racing services, or remote licences as these services are exempt from the local content licence condition.

[6] This is the most recent available data at time of publication.

[7] Except regional commercial radio broadcasting services licensed under section 40 of the BSA, regional racing services, or remote licences that are exempt from the minimum service standards and local presence obligations that apply following a trigger event.

[8] Potential prohibited content is defined at clause 21 of Schedule 7 of the BSA.

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—fourth 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 online child sexual abuse material that is hosted outside Australia.

AISI—Australian Internet Security Initiative
Collects data from various sources on compromised computers (sometimes referred to as 'zombies', bots or 'drones'). The ACMA analyses this data and provides free daily reports to participating Australian internet service providers (ISPs) identifying IP addresses operating on their networks that appear to be compromised.

auDA—.au Domain Administration
Organisation established to develop an effective self-regulatory regime for internet domain names in Australia.

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 that does not tie up a telephone line exclusively for data.

cable—hybrid fibre coaxial cable (HCF)
Transmission links consisting of optical fibre on main routes, supplemented by coaxial cable closer to the end user's premises.

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)
Telecommunications 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 subscription 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.

DAB—Digital Audio Broadcasting
A digital radio technology for broadcasting radio stations.

data traffic
Volume of data transferred in both directions between a customer and his or her ISP. Data traffic is measured in bytes.

DoC—Department of Communications
Commonwealth department responsible for, among other things, communications policy.

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.

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).

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).

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.

FSAM—Fibre Serving Area Modules

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.

HDTV
A digital television broadcasting system with higher resolution than traditional television systems.

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 online child sexual abuse material. The ACMA is an INHOPE member.

interception
The interception of telecommunications services for the purpose of law enforcement and national security.

internet telephony
See **VoIP**.

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 for the enhancement of mobile networks beyond 3G capabilities. It is associated with 4G system builds providing higher data rates, higher quality of service and better resource utilisation.

M2M—machine-to-machine
Devices that are communicating using wired and wireless networks. They are not computers in the traditional sense and are using the internet in some form or another.

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 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.

MPS—mobile premium services
Content information and entertainment services delivered to a mobile phone that includes both premium SMS/MMS and mobile portal services.

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 multi-technology mix.

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.

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.

OTT—over-the-top services
Online delivery of video direct to the consumer without the internet service provider being involved in the control or distribution of the content itself.

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.

prepaid
A contract system by which users pay an amount up-front to purchase a certain amount of usage or credit.

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.

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.

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.

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.

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.

URL—uniform resource locator
A unique address for accessing information and services over the internet.

USO—universal service obligation
Obligation under the *Telecommunications (Consumer Protection and Service Standards) Act 1999* 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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