Australian
Competition &
Consumer
Commission

Telecommunications competitive safeguards for 2005–2006

Changes in the prices paid for telecommunications services in Australia 2005–2006

2005–06

ACCC telecommunications reports

ACCC telecommunications reports

2005–06

This publication contains two reports:

Report 1 **Telecommunications competitive safeguards for 2005–06**

Report 2 **Changes in prices paid for telecommunications services in Australia, 2005–06**

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24 April 2007

Senator the Hon. Helen Coonan
Minister for Communications, Information Technology and the Arts
Parliament House
CANBERRA ACT 2600

Dear Minister

The Australian Competition and Consumer Commission is required under the *Trade Practices Act 1974* (the Act) to annually review and report on:

- competitive safeguards within the Australian telecommunications industry (sub-section 151CL(1) of the Act)
- changes in prices paid by consumers for telecommunications services (sub-section 151CM(1)(a) of the Act).

Enclosed are the two reports for the 2005–06 financial year. As you are aware, subsections 151CL(5) and 151CM(3) of the Act require you to table them in each house of parliament within 15 sitting days of receipt.

I have highlighted the key messages in each report below.

Report 1—Telecommunications competitive safeguards

2005–06 was a year of noteworthy developments in the telecommunications industry. Users benefited from significant investments by numerous competing carriers in:

- 3G mobile networks and
- broadband enabling digital subscriber line access multiplexers (DSLAMs) installed in local telephone exchanges.

The total size of the communications industry continued to grow in 2005–06. Investment in communications grew from $6.3 billion in 2004-05 to $6.9 billion in 2005-06.

2005-06 was also characterised by robust debate about the current regulatory regime and its application to investments in infrastructure upgrades such as proposed fibre-to-the-node (FTTN) networks.

During the period an increasing number of carriers took advantage of the unconditioned local loop service (ULLS) and line sharing service (LSS) to deploy their own DSLAM infrastructure for the supply of telecommunications services. These commitments have underpinned further investments by other carriers in competing backhaul infrastructure.

The benefit of carriers investing in their own facilities was demonstrated with a number of carriers gaining a competitive advantage in broadband services through the early launch of ADSL2+ services offering higher transmission speeds. Telstra responded in late 2006 by matching its ADSL2+ competitors, however only in those regions in which its competitors had already invested in their own infrastructure.

While there has been improvements in service quality and price competition as a result of these substantial and rapid increases in investment in infrastructure, competition for the delivery of services to end users remains fragile. Access seekers remain reliant on Telstra's ULLS and LSS services, and thus are exposed to substantial risks of unforeseen changes to the price and non-price terms and conditions of access which may harm their ability to access Telstra's network in an equivalent manner to Telstra. Furthermore, competitors are also exposed to significant risks arising from the prospective roll-out of an FTTN network upgrade.

Telstra announced in November 2005 that it was exploring an FTTN upgrade to its network in metropolitan areas. In March 2006, Telstra began discussions with the ACCC over mechanisms for enabling competitors to access the proposed network and for Telstra to receive an appropriate return on investment. Telstra withdrew the proposal in August 2006 without lodging a formal access undertaking.

A second proposal for an FTTN upgrade was later raised by a group of nine carriers. The G9 group continued to discuss the regulatory aspects of its proposal with the ACCC in early 2007.

Another major development during the year was Telstra's rollout of its NextG (3G) mobile network, significantly improving the capacity to provide broadband services to mobile devices. The launch of the NextG network has prompted rival carriers to rollout or upgrade their own 3G infrastructure. For some applications mobile broadband provides an alternative to more established broadband technologies, albeit currently at prices significantly higher than fixed line alternatives.

The industry continued its transformation in 2005–06 with a further reduction in the number of fixed voice services in operation and revenues. At the same time the use of other services such as mobiles and VoIP increased.

A new strategy used by fixed line providers has been to offer users 'bucket' or 'capped' plans. This type of plan generally does not charge for calls unless a capped amount is exceeded. Over time it is likely that the increased take-up by consumers of such plans will have implications for the structure of retail price controls applied to fixed line voice services.

In terms of regulatory activity, 28 new telecommunications access disputes were brought before the ACCC in 2006 for arbitration under Part XIC of the TPA. This is the highest number of disputes notified in a single year, and compares to a low of zero

disputes being notified in 2002 and 2003. By the end of 2006, 92 access disputes had been notified to the ACCC since the legislation was introduced in 1997. Telstra has been a participant in 74 of the disputes, mainly as an access provider, while Optus has been in 31.

Report 2—Changes in prices paid for telecommunications services in Australia

The overall average price paid by consumers for telecommunications services fell in real terms by 6.5 per cent in the 2005–06 financial year. Fixed-line and mobile consumers benefited equally from the reductions, with the prices paid for fixed-line services falling 6.6 per cent and prices paid for mobile services falling 6.5 per cent.

The decline in average prices could have been influenced by several factors, including productivity gains in the telecommunications sector and greater price competition faced by providers of fixed-line services.

The fall in prices paid for fixed-line services was not reflected evenly across the residential and business segments. Average prices paid by residential and business customers fell by 5.5 per cent and 8.6 per cent respectively. As in previous years, price falls for businesses continued to exceed price falls for residential consumers in 2005–06.

Across the individual fixed-line services, price falls in 2005–06 for fixed-to-mobile and local calls have been the largest, with prices falling by 10.5 per cent and 9.5 per cent respectively. The retail price decline for fixed-to-mobile services could have been affected by the declining cost of inputs—in particular, mobile terminating charges—as a result of the ACCC's recent decisions on charges for the mobile terminating access service. Price changes for local calls in 2005–06 could have reflected carriers' treatment of discounts to customers purchasing bundles of telecommunication services, or treatment of per-call revenues from customers subscribing to fixed-line 'capped calling plans'.

In mobile services retail markets, average prices paid by consumers fell by 6.5 per cent in 2005–06. Prices for GSM services decreased by 6.7 per cent and prices for CDMA services declined by 3.3 per cent.

Prices for post-paid GSM services and post-paid CDMA services dropped by 10.2 per cent and 3.6 per cent respectively. It appears that carriers have, since 2004–05, renewed their competition for post-paid (contract) subscribers after focusing in recent years on prepaid mobile consumers. The continued take-up of 'capped' plans and subsidies for handsets has resulted in larger price falls in 2005–06 for consumers of post-paid services with very high usage. Prices for prepaid mobile services declined more slowly in 2005–06 than for post-paid services.

Yours sincerely

Graeme Samuel
Chairman

Telecommunications competitive safeguards for 2005–06

Contents

1 Summary

Under Part XIB, Division 11, s. 151CL(1) of the *Trade Practices Act 1974* (the TPA), the Australian Competition and Consumer Commission is required to provide the Minister for Communications, Information Technology and the Arts with an annual report on competitive safeguards within the Australian telecommunications industry.

This report covers financial year 2005–06 and ongoing actions immediately afterwards. All of the ACCC publications referred to in this report are available at www.accc.gov.au.

The key findings of the report are outlined below.

1.1 State of competition

2005–06 was a year of noteworthy developments in the telecommunications industry. Users benefited from significant investments by numerous competing carriers in:

- 3G mobile networks
- broadband-enabling digital subscriber line access multiplexers (DSLAMs) installed in local telephone exchanges.

The total size of the communications industry continued to grow in 2005–06. Investment in communications grew from $6.3 billion in 2004–05 to $6.9 billion in 2005–06.

2005–06 was also characterised by robust debate about the current regulatory regime and its application to investments in infrastructure upgrades such as proposed fibre-to-the-node (FTTN) networks.

During the period an increasing number of carriers took advantage of the unconditioned local loop service (ULLS) and line-sharing service (LSS) to deploy their own DSLAM infrastructure for the supply of telecommunications services. These commitments have underpinned further investments by other carriers in competing backhaul infrastructure.

The benefit of carriers investing in their own facilities was demonstrated with a number of carriers gaining a competitive advantage in broadband services through the early launch of ADSL2+ services offering higher transmission speeds. In line with this advantage, the number of ULLS and LSS in operation grew by about 73 per cent in the nine months to December 2006. Telstra responded in late 2006 by matching its ADSL2+ competitors—however, only in those regions in which its competitors had already invested in their own infrastructure.

At the same time, prices for fixed-line voice services fell by around 6.6 per cent in real terms during 2005–06.

While there has been improvements in service quality and price competition resulting from these substantial and rapid increases in infrastructure investment, competition for the delivery of services to

end users remains fragile. Access seekers remain reliant on Telstra's ULLS and LSS. They are therefore exposed to substantial risk from unforeseen changes to the price and non-price terms and conditions of access. This may inhibit their access to Telstra's network. Furthermore, competitors are also exposed to significant risks arising from the prospective roll-out of an FTTN network upgrade.

Fibre networks can take various forms, including fibre-to-the-home (FTTH) and FTTN. Fibre deployments would be a gain for consumers in terms of higher data speeds, assuming services are provided at appropriate prices.

FTTH provides a new end-to-end fibre network to the customer's premises, bypassing the existing copper network. By contrast, FTTN upgrades the copper network, providing fibre up to a local street corner node but still using copper from the node to the premises. Research done by Ovum for the ACCC indicates that FTTH plans tend to emerge in countries such as the United States with strong infrastructure competition between telephone and cable television companies, or where there have been government subsidies such as Japan and Sweden. FTTN plans have been less common to date and have generally emerged in countries such as Germany and Australia that rely more on ULL access for broadband competition.

Telstra announced in November 2005 that it was exploring an FTTN upgrade to its network in metropolitan areas. In March 2006, Telstra began discussions with the ACCC on mechanisms for enabling competitors to access the proposed network and for Telstra to receive an appropriate return on investment. Telstra withdrew the proposal in August 2006 without lodging a formal access undertaking.

Telstra has argued that its proposed FTTN upgrade is required to improve the quality of services available to end users. However, if it were to go ahead it would have a profound effect on competition, stranding competing investments in DSLAMs and backhaul infrastructure.

A second proposal for an FTTN upgrade was later raised by a group of nine carriers. A central feature of this model is the separation of the network ownership and management from downstream retail service provision with open network access on equivalent terms to all access seekers, regardless of their ownership interests in the network. The G9 continued to discuss the regulatory aspects of its proposal with the ACCC in early 2007.

The unresolved status of Telstra's proposed FTTN deployment, however, risks substantially inhibiting ongoing investments in competing DSLAMs and backhaul infrastructure for all carriers other than Telstra.

Another major development during the year was Telstra's rollout of its NextG (3G) mobile network, significantly improving the capacity to provide broadband services to mobile devices. The launch of the NextG network has prompted rival carriers to roll out or upgrade their own 3G infrastructure. For example, in early 2007 Optus announced it would extensively upgrade its own 3G network. For some applications, mobile broadband provides an alternative to more established broadband technologies, albeit currently at prices significantly higher than fixed-line alternatives.

The industry continued its transformation in 2005–06 with a further reduction in the number of fixed-voice services in operation and revenues. At the same time the use of other services such as mobiles and VoIP (voice over internet protocol) increased.

A new strategy used by fixed-line providers has been to offer users 'bucket' or 'capped' plans. This type of plan generally does not charge for calls unless a capped amount is exceeded. Over time it is likely that the increased take-up by consumers of such plans will have implications for the structure of retail price controls applied to fixed-line voice services.

The move by fixed-line operators to offer bucket plans follows their popularity in mobile services, where prices also fell significantly—around 6.5 per cent in real terms during 2005–06. The growth of these plans resulted in the ACCC reporting more significant price reductions in 2005–06 for post-paid mobile subscribers rather than for prepaid subscribers.

In terms of regulatory activity, 28 new telecommunications access disputes were brought before the ACCC in 2006 for arbitration under Part XIC of the TPA. This is the highest number of disputes notified in a single year and compares to a low of zero disputes notified in 2002 and 2003. By the end of 2006, 92 access disputes had been notified to the ACCC since the legislation was introduced in 1997. Telstra has been a participant in 74 of the disputes, mainly as an access provider, while Optus has been in 31.

1.2 Anti-competitive conduct and consumer safeguards

In 2005–06 the ACCC progressed 10 investigations into anti-competitive conduct, of which nine were concluded in 2005–06.

A part A competition notice was issued to Telstra on 12 April 2006 in relation to Telstra's Home Access and Homeline Part rental price increases made in December 2005.[1] In August 2006 Telstra challenged the validity of the ACCC's competition notice and consultation notice in the Federal Court, primarily under the *Administrative Judicial Decision Review Act 1977*.

The ACCC received a number of third line forcing notifications for minor matters in 2005–06.

A total of 3117 consumer protection complaints about the telecommunications industry were registered with the ACCC in 2005–06. Investigations were progressed on 12 consumer protection matters, including those relating to the following companies:

- Global Pre Paid Communications Pty Ltd
- SingTel Optus Pty Ltd
- Dataline.net.au.

1 On 2 March 2007, the ACCC lifted the part A competition notice issued to Telstra in light of changing regulatory circumstances, including the declaration of the wholesale line rental service. Further information will be provided on this in the telecommunications competitive safeguards report for 2006–07.

1.3 Tariff filing, record keeping, monitoring and reporting

The following developments occurred in 2005–06:

- Telstra complied with requirements to give the ACCC tariff filing information.
- The ACCC issued its latest assessment of Telstra's compliance with its retail price control arrangements in November 2006, noting that it was satisfied that Telstra has adequately complied with its price control arrangements.
- The third report on competition in the corporate segment of the business customer group covering the period between January 2004 and December 2005 was tabled in parliament.

1.4 Access related activities

In 2005–06 the ACCC undertook two separate reviews of its approach to the regulation of fixed-line services.

The ACCC's local services review was concluded in July 2006. The ACCC decided to re-declare the local carriage service (LCS) and to formalise the declaration of a wholesale line rental (WLR) service.

The ACCC completed the first stage of its review into fixed network services in July 2006. The outcome was to re-declare the ULLS and public switched telephone network origination and termination access (PSTN O/TA) services for a period of three years. The ACCC also decided to revoke the conditioned local loop service and not to declare a wholesale xDSL service.

In addition to the two larger reviews, the ACCC released a discussion paper in November 2006 seeking submissions in regards to the continued declaration of the analog subscription broadcast carriage service.

1.5 Activities under the Telecommunications Act

Legislation passed by parliament in September 2005—and subsequent ministerial determinations made under the *Telecommunications Act 1997* (the Telecommunications Act)—had provisions requiring the operational separation of Telstra. The aim of the framework is to provide assurance that Telstra is not favouring its retail business units over its wholesale customers. The minister approved Telstra's operational separation plan in June 2006. In August 2006 the ACCC released an information paper that outlined its role in relation to monitoring pricing aspects of the operational separation of Telstra.

The ACCC also has a role in arbitrating disputes that arise under the Telecommunications Act. In September 2006 the ACCC was notified of an access dispute under the Telecommunications Act. The dispute related to the price paid by Optus for access to telecommunications towers owned or operated by Telstra and the sites of such towers.

During that time the ACCC also participated as an observer in the development of codes for telecommunications services by the Communications Alliance. The Communications Alliance made progress on several codes, including the one covering VoIP. There was also some revision of the code on local number portability.

2 Overview of the state of competition in telecommunications markets

2.1 Overview

The state of competition in telecommunications markets continues to receive particular attention from policymakers and regulators around the world because it has important consequences for users in terms of prices, quality of service and innovation.

Consumer benefits are maximised where competition is as effective as possible in all vertical levels of the market from infrastructure to retailing. Infrastructure competition—also referred to as facilities based competition—occurs where competing forms of stand-alone infrastructure are capable of providing a range of substitutable telecommunications services. This creates a basis for more durable competition.

Quasi infrastructure competition occurs where firms provide services using a combination of their own facilities and access to parts of another party's network. Although not as durable as infrastructure competition, this form of competition is more effective than resale competition.

There was significant investment in infrastructure in this reporting period. Investment in communications grew from $6.3 billion in 2004–05 to $6.9 billion in 2005–06.[2]

During the period an increasing number of carriers took advantage of the ULLS and LSS to deploy their own infrastructure for the supply of telecommunications services. The numbers of ULLS and LSS in operation grew about 73 per cent in the nine months to December 2006. This shift has been driven by a combination of carriers reaching sufficient customer density thresholds in exchanges through the resale of services, a reduction in ULLS prices towards Telstra's costs, and falling equipment prices.[3] The benefits of carriers investing in their own facilities was demonstrated with a number of ISPs gaining a competitive advantage through the early launch of ADSL2+ services offering higher transmission speeds. Telstra responded to this competitive pressure by upgrading its services to ADSL2+ in areas where competitors are offering similar speeds. It claimed that it would not provide these services on a more extensive basis because of concerns the ACCC would regulate access to a wholesale ADSL2+ service.[4] Telstra also increased the speeds available through its ADSL services from a theoretical maximum of 1.5 megabits per second (Mbps) to a theoretical maximum of 8 Mbps.

Despite a number of positive developments with new investment by competing carriers, the ACCC remains alert to various threats to existing and future competition. The ACCC's concerns mainly relate to the continuing reliance by competitors on Telstra's copper local access network, which connects

2 Australian Bureau of Statistics, Australian System of National Accounts, catalogue 5204.0, table 71.

3 Telstra, *Annual report 2006*, p. 23.

4 Telstra media release, 'BigPond marks 10th Anniversary with launch of national high speed broadband', 10 November 2006.

virtually every home and business. Most competitors must purchase at least some services from Telstra to participate in fixed-line retail markets, while at the same time competing against Telstra's vertically integrated retail business.

Competitors have shown that they can mitigate their reliance on Telstra through investment in DSLAMs which provide broadband and voice services through the ULLS or LSS. However, the extent to which this competitive pressure continues in the future remains dependent on matters such as the pricing of the ULLS and LSS, as well as other qualitative conditions of access. Other risks to this form of competition include potential delays for competitors in migrating resale customers across to their own DSLAM infrastructure, and the prospect that competitors' DSLAM investments may be left stranded by an FTTN upgrade to the network.

Telstra first indicated that it was exploring an FTTN upgrade to its network in metropolitan areas in November 2005. This upgrade would have seen the extension of optical fibre further from the exchange and closer to the customer's premises, enabling higher transmission rates for those premises served by relatively longer copper loops. It also would have created challenges for future competition by inhibiting or preventing competitors from using their existing DSLAM investments in exchanges to compete for customers. In March 2006, Telstra began discussions with the ACCC over mechanisms for enabling competitors to access the proposed network and for Telstra to receive an appropriate return on investment. Telstra withdrew the proposal in August 2006 without lodging a formal access undertaking with the ACCC. Telstra noted at the time when it withdrew from talks that it disagreed with the ACCC's view of de-averaging wholesale prices for the network.[5]

Throughout the FTTN talks the ACCC demonstrated that it was prepared to consider new proposals and to ensure that regulatory solutions evolve over time as technological developments transform the industry. The ACCC acknowledges that while the ULLS is a key regulatory instrument in the current market environment, the infrastructure underpinning telecommunications services is constantly evolving, and regulatory solutions are sufficiently flexible to adapt and deal with any bottlenecks which may arise in future.

A second proposal for an FTTN upgrade was later raised by a group of nine carriers. A central feature of this model is the separation of the network ownership and management from downstream retail service provision with open network access on equivalent terms to all access seekers, regardless of their ownership interests in the network. The G9 continued to discuss the regulatory aspects of its proposal with the ACCC in early 2007.

Another significant development for the industry was Telstra's launch of its new third generation NextG mobile network in October 2006. The 3G network is Australia's largest, covering 98 per cent of the population.[6] In addition to voice services, Telstra claims the GSM network will also provide broadband services to users with transmission speeds averaging 550 kilobits per second (Kbps) to 1.5 (Mbps), and peak network speeds of up to 3.6 Mbps. The launch of the NextG network has prompted rival carriers to roll out or upgrade their own 3G infrastructure. For example, in early 2007 Optus announced it would extensively upgrade its own 3G network.

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5 Telstra ASX Announcement, 'Transcript from fibre to the node briefing Q & As', 7 August 2006, p. 8.

6 Telstra media release, 'Telstra's turbo-charged, nationwide mobile broadband network goes live', 6 October 2006.

With the launch of Telstra's NextG network and the greater uptake of 3G services, broadband on mobiles became a more realistic option for consumers and businesses in 2005–06. These networks enable email and specifically tailored internet content to be accessed from mobile phones and personal digital assistants, as well as provide an alternative to more established broadband technologies such as xDSL and hybrid fibre coaxial (HFC) cable.

Another feature of the telecommunications landscape is that Telstra appears to increasingly see its wholesale business as a regulatory obligation, rather than as a business opportunity.

Furthermore, Telstra has exercised its rights to review of two recent decisions made by the ACCC under the regulatory regime. Telstra has sought reviews of ACCC decisions to reject its undertakings for the ULLS and LSS in the Australian Competition Tribunal (the tribunal). The tribunal affirmed the ACCC's decision to reject Telstra's LSS undertaking, while a decision on the ULLS undertaking is due in the first half of 2007. Telstra also announced in January 2007 that it would be challenging the validity of the telecommunications specific access provisions of the TPA in the High Court. Telstra claims the ACCC's price decisions are made using laws that are invalid because they fail to comply with the Australian Constitution which provides the right to just compensation if property is compulsorily acquired.[7] Furthermore, a challenge was made under the *Administrative Judicial Decision Review Act 1977* to the validity of the ACCC's competition notice and consultation in relation to Telstra's Home Access line rental product.

In terms of regulatory activity, 28 new telecommunications access disputes were brought before the ACCC in 2006 for arbitration under Part XIC of the TPA. This is the highest number of disputes notified in a single year, compared to a low of zero disputes notified in 2002 and 2003. To the end of 2006, 92 access disputes had been notified to the ACCC since the legislation was introduced in 1997. Telstra has been a participant in 74 of the disputes, mainly as an access provider, while Optus has been in 31.

A number of industry trends continued to take shape in 2005–06. Large service providers generally reported intense competitive conditions, with price reductions employed across the industry to increase or protect market share and to slow or promote the shift from traditional to emerging services.[8] Average prices for telecommunications services fell by 6.5 per cent, with users benefiting from reductions in average prices for both fixed and mobile services.[9] Telstra followed this trend by reducing its prices for a range of services which helped it to maintain its substantial market shares.

The industry continued its transformation in 2005–06 with a further shift away from fixed-voice products that have traditionally provided service providers with the bulk of their revenues. Fixed-line voice revenues continued to decline due to both price reductions and the falling number of services in operation. In many cases households are also disconnecting their second phone lines as they shift from dial-up internet connections to broadband. Broadband allows for simultaneous use of both the internet and the phone on the one copper line, thereby obviating the need for a second phone line.

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7 Telstra media release, 'High Court asked to enforce shareholders' constitutional rights', 24 January 2007.

8 This commentary on competitive pressures, industry transformation, and the strategies employed by service providers is based on analysis of Telstra's *Annual report 2006*, Telstra's *Annual review 2006*, Singapore Telecommunications' *Management discussion and analysis of unaudited financial condition, results of operations and cash flows for the second quarter and half year ended 30 September 2006*, and Telecom New Zealand's *Annual report 2006* (which includes AAPT).

9 ACCC, *Changes in the prices paid for telecommunications services in Australia 2005–06*.

In contrast, consumer and businesses are increasing their use of other services such as mobiles and VoIP.[10] This change in the product mix of telecommunications providers from traditional to emerging products has occurred in both access and calling patterns.

About 69 per cent of fixed-voice access lines are supplied directly by Telstra's retail business, while about 19 per cent are supplied by resellers of Telstra's wholesale line rental service.[11] The share of the latter category has slightly increased over the past two years, at the expense of access lines provided by Telstra directly to its own retail customers.

A number of strategies, in addition to price reductions, have been used by the larger retail service providers such as Telstra, Optus and AAPT. One strategy has been to bundle declining fixed telephony services with growing services such as mobiles and broadband. Telstra reported that its attempts to integrate mobile, fixed and broadband services were having some success with an increase in the number of customers using three or more Telstra products.[12] Optus reported that the percentage of customers on its HFC network that took a package of products increased from 69 per cent in June 2005 to 74 per cent in June 2006.[13] AAPT has seen the percentage of its customers taking a bundled offering increase from 13 per cent to 51 per cent in two years.[14] The bundling of fixed, mobile and broadband services gives users the option of purchasing an entire service bundle at a discount price and the convenience of dealing with the one service provider.

A new strategy employed by fixed-line operators such as Telstra, Optus and Primus has been to introduce bucket or capped plans, where calls are not charged on an individual basis unless a capped amount is exceeded.[15] This type of plan has been very successful for mobile providers. The popularity of these plans resulted in the ACCC reporting more significant price reductions in 2005–06 for post-paid mobile subscribers than prepaid subscribers. Some analysts see the emergence of bucket plans for fixed-line services as a defensive move against the increasing availability of alternative communications, in particular the cheap call rates from VoIP providers. However, a major threat from VoIP providers is yet to emerge with only 4.8 per cent of respondents to a Roy Morgan survey in 2006 using VoIP.[16]

Mobile services revenue continued to grow for the industry in 2005–06,[17] although there are signs that market penetration is close to reaching saturation. Saturation refers to the situation where everybody who could be using a mobile service is already doing so. Total mobile phone subscribers increased by seven per cent over the year to 19.76 million[18] and service providers generally reported increases in the number of minutes of use. This growth was encouraged through the continued

10 While services such as mobiles are often described as alternative communications, there are indications that some form of complementarity may exist between them and fixed-line services. For example, mobile phones can have a positive effect on the number of calls made from fixed phones because people do not need to be at home or in an office to be called. Discussion of fixed-to-mobile substitution and complementarity can be found in Rob Albon's 'Fixed-to-mobile substitution, fixed-to-mobile substitution, complementarity and convergence' in *Agenda*, Vol. 3 No. 4, 2006.

11 ACMA, *Communications report 2005–06,* p. 58.

12 Telstra, *Annual review 2006,* p. 38 and Telstra, *Annual report 2006,* p. 13.

13 Singapore Telecommunications, *Management discussion and analysis of unaudited financial condition, result of operations and cash flows for the first quarter ended 30 June 2006*.

14 Telecom New Zealand, *Annual report 2006,* p. 25.

15 Telstra media release, 'New home and mobile cap set to benefit Australian families', 29 July 2005.

16 ACMA, *Communications report 2005–06*, p. 65.

17 ibid, p. 60.

18 ACMA, *Communications report 2005–06*, p. 27.

popularity of capped plans[19] and the increasing use of data services. While voice continues to be the largest contributor to mobile revenues, non-voice revenue (including SMS) is growing quickly and now represents 14 to 25 per cent of revenue.[20] The increasing take-up of 3G mobile services is likely to raise the importance of data revenues in the future.

The competitive tension between the four mobile network operators generates a better competitive outcome than that in fixed services, where there is little competitive pressure placed on Telstra's copper network. Telstra is the largest provider of retail mobile services with a market share of 44 per cent, followed by Optus with 33 per cent.[21] Optus, Vodafone and Hutchison were all able to attract a higher percentage of new customers in 2005–06 than their overall market share.[22] However, the number of new customers was insufficient for this to have much bearing on overall market shares.

While the mobile market in Australia is maturing in terms of participants and market shares, the broadband service market is still emerging. Broadband service providers are competing vigorously to establish themselves as key players in this rapidly developing segment. The number of broadband subscribers increased 67 percent over the financial year to 3 328 400 in June 2006.[23] ISPs offer broadband services over a range of infrastructure platforms such as xDSL, HFC and wireless. Despite strong competitive pressures leading to reductions in prices and improvements in quality, carriers generally reported large increases in revenue because of growing customer bases.

Broadband is a developing part of the telecommunications industry and therefore offers an opportunity for new providers to establish themselves as key participants in the industry. However, Telstra is in a particularly strong position to reap the benefits of the developing industry. Telstra's ownership of two of the most important networks for the provision of broadband—the copper access network and its HFC network—gives it full control over the infrastructure supporting its retail operations. With limited exceptions, competing carriers must rely upon Telstra's infrastructure to provide retail broadband services. The ownership of key local access networks in Australia, particularly access networks covering non-CBD areas, has enabled Telstra to become one of the most integrated communications companies in the world.[24]

Despite Telstra's ownership of key local access networks, other providers of broadband services have been able to obtain a larger market share in retail broadband than in fixed-voice services through xDSL resale and the increasing use of competitive DSLAMs installed in local exchanges.[25] These developments are significant contributors to decreasing prices and improving quality of services over the period. However, the extent to which this competitive pressure continues in the future remains dependent on matters such as the pricing of the ULLS and LSS, as well as other qualitative conditions

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19 For example Optus's share of post-paid customers on capped plans increased from 7 per cent at 30 June 2005 to 21 per cent at 30 June 2006. This was reported in Singapore Telecommunications and Subsidiary Companies, *Management discussion and analysis of unaudited financial condition, result of operations and cash flows for the first quarter ended 30 June 2006*, p. 40

20 For example, see Telstra's *Annual report 2006*, Singapore Telecommunications, *Management discussion and analysis of unaudited financial condition, results of operations and cash flows for the second quarter and half year ended 30 September 2006*, and Hutchison Whampoa's *Annual report 2005*.

21 ACMA, *Communications report 2005–06*, p. 60.

22 ibid.

23 ACCC, *Snapshot of broadband development as at 30 September 2006*.

24 ACCC, *Emerging market structures in the communications sector*, July 2003, p. 31.

25 Telstra, *Annual review 2006*, p. 74.

of access. Other risks to this form of competition include potential delays for competitors in migrating resale customers across to their own DSLAM infrastructure, and the aforementioned FTTN proposals. As such, there remains some fragility to the degree of competitive pressure from ULLS-based providers.

Fibre networks can take various forms, including FTTH and FTTN. Fibre deployments would be a gain for consumers in terms of higher data speeds, assuming services are provided at appropriate prices.

FTTH provides a new end-to-end fibre network to the customer's premises, bypassing the existing copper network. By contrast, FTTN upgrades the copper network, providing fibre up to a local street-corner node but still using copper from the node to the premises. Research done by Ovum for the ACCC indicates that FTTH plans tend to emerge in countries such as the United States with strong infrastructure competition between telephone and cable television companies, or where there have been government subsidies such as Japan and Sweden. FTTN plans have been less common to date and have generally emerged in countries such as Germany and Australia that rely more on ULL access for broadband competition.

Subsidy programs such as Broadband Connect, Networking the Nation and Metro Broadband Connect are designed to encourage the entry of new competitive infrastructure into less populated areas of Australia, particularly in broadband internet.

As the market for broadband grows it will begin to have implications for the regulation of traditional telecommunication services. This is because an emerging development for the regulation of telecommunication markets is the capability, and increasing occurrence, of telecommunication services being provided over internet protocol (IP) packet switched technologies. IP technology is impacting both the core of telecommunication networks as well as the means of connecting to those networks (such as with ADSL2+ and with HSDPA). This is providing both an opportunity for new types of services as well as migration from one technology to the other, with consequent impact on existing competition models. As well as changing the market structure for infrastructure competition, it is expected to provide increased scope for competition at the application layer.

Indeed, the move towards bucket plans suggests such a trend is already occurring. This might have implications not only for competition regulation, but other policy levers such as the retail price controls.

There have been recent limited moves towards rationalisation in the telecommunications industry:

- a takeover bid by Telecom New Zealand for PowerTel
- PowerTel taking a holding in iiNet
- nine companies forming an alliance (the G9) to propose an FTTN network
- collaboration between providers to submit bids for Broadband Connect funding.

Rationalisation or collaboration amongst smaller operators may generate better competitive outcomes as the merging of smaller operators could enable them to achieve larger scale and compete more effectively. It is yet to be seen whether any of these developments will have a significant effect on competition in telecommunications markets.

2.2 State of competition in telecommunications markets

For reporting purposes, the ACCC assesses competition on a service-by-service basis. This should not, however, be taken as a definitive view of the boundaries for particular markets. In some cases markets may be more granulated because of consideration of geography and consumer types or be more aggregated due to bundling and substitution possibilities. In general, market boundaries are subject to change and are contingent on a number of factors, such as current modes of competition and directions in regulation. The service segments represented here were chosen for information purposes rather than to reflect market boundaries the ACCC would adopt in any formal assessment of competition under Parts IV, XIB or XIC of the TPA.

Technological developments have meant that many aspects of different service segments are converging and that distinct boundaries are becoming more difficult to identify. However, this has not yet occurred to such an extent whereby it is no longer appropriate to consider each service segment on an individual basis. It is also considered easier to put separate assessments together to gain an understanding of a converged industry than vice versa. However, the ACCC notes that, commensurate with such changes over time, the structure of this report and the analysis of individual services can be expected to evolve when appropriate in subsequent reporting periods.

Discussion about assessing the level of competition in a market can be found in the ACCC's reports *A strategic review of the regulation of fixed network services: a second position paper* and *Telecommunications Competition Safeguards for 2004–05*.

2.3 Fixed-line telecommunications services

A full fixed-line voice service consists of:

- basic access, which is charged on the basis of a connection fee and monthly line rental
- local calls
- national long-distance calls
- international calls and
- fixed-to-mobile (FTM) calls.

2.3.1 Local telecommunications services

Local telecommunications services consist of basic access to a network plus the provision of local calls. Basic access to a customer access network is a prerequisite for all fixed-line products and xDSL broadband.

Basic access can be provided using one of several networks. The vast majority—up to 88 per cent of Australian homes and businesses—rely on voice services provided using Telstra's near ubiquitous copper network. The considerable geographic reach and significant cost to duplicate Telstra's network are indications that it exhibits natural monopoly characteristics for the provision of basic access and other fixed services. The copper network is the source of Telstra's dominance in the provision of several telecommunications services.

Wholesale service provision

Current market arrangements allow for three competitive models for the provision of basic access and local calls:

- Regulated wholesale services—the LCS and WLR—can be bought from Telstra and resold to retail customers. Because all these services are declared they must be supplied to access seekers on terms that satisfy standard access obligations (SAOs).
- Competitors may rent the ULLS from Telstra and combine it with their own or others' infrastructure.
- Stand-alone networks may be built to compete with Telstra's copper access network.

ACMA reports that there were 11.25 million fixed telephone services in operation at 30 June 2006.[26] The number of lines fell for a second year after a peak of 11.58 million services at 30 June 2004.[27]

Telstra provides 69 per cent of these access lines for its own retail customers and a further 19 per cent for its wholesale customers.[28] Optus accounts for the majority of the rest of the access lines through its HFC network, which passes about 1.4 million homes.[29] Telstra also owns an HFC network, which passes about 2.2 million homes, most of which are in the same areas as Optus's network. However, Telstra's HFC network is not presently used to provide basic telephony services.

Fixed wireless access is an alternative to wireline access. A wireless local loop connects subscribers to the PSTN using radio frequency signals as a substitute for the copper wire for all or part of the distance between the exchange and the customers' premises. Fixed wireless access networks tend to be focused primarily on supplying broadband rather than telephony services, although wireless local loop is used to provide some remote users with voice services. Fixed wireless networks differ from conventional (mobile) wireless networks (mobile networks providing a continuous service for mobile phones and personal digital assistants) in that the transmitter and receivers are stationary, such as a

26 ACMA, *ACMA communications performance report 2005–06*, p. 58.

27 ACMA, *Telecommunications performance report 2004–05*, p. 1.

28 ACMA, *ACMA communications performance report 2005–06*, p. 58.

29 ACMA, *Communications services availability in Australia 2005–06*, p. 18.

modem on a desk or an antenna fixed to a house. Further discussion of fixed wireless networks can be found in 2.5.

Optical fibre can also be used in the access network between the exchange and the customers' premises, although this approach is not widely utilised at present. One attraction of fibre networks is that they provide higher transmission speeds. Fibre networks are discussed in more detail in 2.5.

Although alternative telecommunications access networks using fixed wireless, optical fibre and satellite services have emerged to some extent, they have not displaced Telstra's copper customer access network as the dominant method of delivering telecommunications services to customers. This is not to say that networks such as these will not be of greater importance in the future, but at this point in time they have not significantly eroded the dominant position of Telstra's customer access network.

Wholesale barriers to entry

There are substantial barriers to entry which limit the ability of new entrants and existing players to deploy customer access networks and compete effectively in local telecommunications using only their own infrastructure.

The establishment of telecommunications access infrastructure involves substantial investment that largely becomes sunk. This increases the risks of investment and potential for failure, thus making new investment less attractive.

Telecommunications networks are also characterised by significant economies of scale and scope, so duplication of existing networks is unlikely to always be efficient.[30] These economies of scale are reinforced by the significant economies of density that exist over the customer access network in metropolitan and central business district areas.[31]

Together, these economies are likely to continue to limit the extent of network deployments in the foreseeable future.

Additionally, the sunk network costs of the incumbent can lead to aggressive wholesale pricing aimed at new entrants, thus acting as an additional barrier to entry. If considered necessary, the ACCC is able to use the anti-competitive conduct provisions of Parts IV and XIB of the TPA to address competition concerns that may arise from such conduct. However, use of these provisions is analysed on a case-by-case basis. Conduct of this type often presents evidentiary challenges and may take significant time to resolve.

30 Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise from a production in which it is less costly in total for one firm to produce two (or more) products than it is for two (or more) firms to produce separate products.

31 Economies of density arise from a production process in which the average (or per unit) cost of production decreases as the population density of the area being serviced increases.

ULLS-based competition

The ULLS involves the use of unconditioned metallic pairs within the customer access network. Competitors install their own equipment in Telstra's exchanges and pay Telstra a monthly charge for each customer that chooses to take services from them. The ULLS provides access seekers with direct access to the users and is used as a component for the supply of both voice services and broadband communications.

Access to the ULLS allows access seekers to provide customers with a higher quality and more diverse range of broadband services than is currently possible by simply reselling Telstra's existing ADSL service.

The ACCC views the ability for competitors to access Telstra's copper network to provide a larger range of services as an important part of promoting outcomes for users. It is particularly important given there are no widespread cable or wireless CAN networks available or in prospect to compete with the ubiquitous copper network.

ULLS-based competition became more significant in 2005–06 at a time when broadband take-up grew strongly. The use of the ULLS in the provision of broadband services is explored in greater detail in 2.6.

Barriers to entry in relation to the ULLS

Use of the ULLS to provide fixed voice and broadband service requires significant investment by potential competitors. The risks of investment are high. Furthermore, new entrants need to acquire large numbers of customers to achieve minimum efficient scale to be able to compete effectively with Telstra. This is generally achieved through the resale of other wholesale services prior to committing to a deployment of ULLS-based infrastructure. However, as noted above, there are difficulties in achieving the necessary customer base through resale activities, including status quo bias, long-term contracts and the need to obtain the necessary wholesale inputs from Telstra.[32] Additionally, Telstra, as the wholesale provider of the inputs for the resale local telecommunications services and the ULLS, may have an incentive to employ tactics such as price and non-price discrimination to frustrate new entry. There is also a risk that ULLS-based competition can become stranded through changes to the network architecture upon which such investments are made. This is particularly relevant given the current debate about an FTTN upgrade to the existing network.

Despite the signals that ULLS-based competition can provide a platform for effective competition, there are also risks to the sustainability of such competition. Major changes to the existing network architecture, such as a FTTN upgrade, could result in those assets becoming stranded.

Retail service provision

Market shares for the provision of basic access and local calls continue to be highly concentrated.

32 Status quo bias refers to a concept where consumers do not to change their service providers despite the existence of more economic alternatives.

About 69 per cent of access lines are supplied directly by Telstra's retail business, while approximately 19 per cent are supplied by resellers of Telstra's wholesale line rental service.[33] The share of the latter category has slightly increased over the past two years, at the expense of access lines provided by Telstra directly to its own retail customers.

The customer service guarantee (CSG) standard sets out minimum service standards for carriers providing basic telephony services to customers that have five lines or less. ACMA reports on CSG figures by carrier and therefore provides some indication of market shares for fixed-line services more generally.

ACMA's data shows that the retail market for CSG services is highly concentrated.[34] Telstra's share of CSG services remained stable in 2005–06 with 77 per cent. Optus and AAPT supplied 13 per cent and seven per cent respectively. Total CSG services continued their downward trend with a three per cent fall in 2005–06. This suggests that competitors cannot look to new customers entering the market to build up a customer base and need to rely upon customer churn.

Imputation testing shows that competitors as efficient as Telstra that resell only WLR and the LCS would not be able to make a profit. Thus the sale of local calls and basic access, without the provision of other fixed services, such as long-distance, international and FTM calls, would not appear to be a viable entry option. Not surprisingly, none of the competitors that have entered the resale market sell only local services.

Pricing conduct

The ACCC's report on price changes in 2005–06 showed that average prices for basic PSTN access fell for the first time since service providers began 'rebalancing' access prices in 1999–2000.[35] Rebalancing refers to the process of raising access prices while reducing call prices. The average price of basic access fell 2.4 per cent in 2005–06, although remain 75 per cent higher than in 1997–98 when full competition was introduced.

The fall in average prices for basic access in 2005–06 may have been influenced by several factors:

- Carriers' treatment of discounts provided to customers who acquire a bundle of services—carriers may be allocating the discounts to basic access only.
- Carriers such as Telstra have offered discounts on connection charges for second lines.
- Telstra's treatment of pensioner discounts, as these are offset against basic access revenues.

The price of local calls fell 9.5 per cent in 2005–06 and is now 49 per cent cheaper than 1997–98 levels. The price changes in the past year could reflect several factors, such as the continued rebalancing of access and call costs, carriers' treatment of bundling discounts and the treatment of per-call revenues from customers that subscribe to capped calling plans.

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33 ACMA, *Communications report 2005–06*, p. 58.

34 ibid, p. 274.

35 ACCC, *Changes in the prices paid for telecommunications services in Australia 2005–06*.

While competitive responses appear to have driven the reduction in local services prices, the retail price control arrangements that apply to Telstra should also be taken into consideration. More information about Telstra's price control arrangements can be found in 5.2.

Competition for basic access and local calls has traditionally been enabled by regulation of the LCS. The ACCC concluded its review of local services in July 2006 and decided to re-declare the LCS for a period of two years, as well as declaring a WLR service for two years. The ACCC review into local services found that outside CBD areas there is currently no effective substitute for the LCS or WLR.[36] Previously WLR had been regulated indirectly through the ACCC's approach to pricing the LCS.

The ACCC released pricing principles outlining the methodology that it would use for pricing both the LCS and WLR services. The prices for the LCS and WLR will be determined using Telstra's unbundled local call price but, in recognition that basic access is bundled with local calls in practice, the access prices are calculated on the basis of the costs of transforming the WLR and local call products into the corresponding retail products. This retail-minus-retail-cost approach is designed to ensure competitive neutrality between access seekers and the Telstra retail level.

The ACCC will seek to implement a cost-based pricing approach once a robust cost model is available. The process toward developing the cost model commenced with the ACCC issuing a request for tender (RFT) on 16 February 2007 for the provision of an economic cost model of fixed network services. The model will cost all fixed network services in Australia. The closing date for the RFT was 23 March 2007, with completion of the cost model expected early next year.

Retail barriers to entry

While there are fixed costs associated with establishing operations as a retailer of local telecommunications services on the basis of resale arrangements, these are not as significant as those associated with establishing infrastructure for the provision of these services.

Nevertheless, potential entrants would be aware that Telstra and Optus are likely to face costs that are significantly lower than their own, giving a new entrant less scope to respond if Telstra and Optus offer lower prices. Thus, to build a large customer base, a firm may need to sell well below the prices of Telstra and Optus (which may be below cost) to acquire market share and greater scale benefits to push average costs down. This can involve significant risks for a new entrant.

Customer inertia, or status quo bias, also acts as a barrier to achieving sufficient scale to compete effectively. When combined with actual switching costs (such as contract lock-in) and information asymmetry about the range of available contracts, Telstra has considerable advantages as the incumbent default provider of local telecommunications.[37]

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36 ACCC, *Local services review*, July 2006, p. 7.

37 It is difficult to ameliorate status quo bias in the short-medium term, as it is consumers' greater knowledge of and confidence in alternative providers and their service offerings that will mitigate consumers' tendency to stick with their original service provider. A more detailed discussion of status quo bias is contained in the ACCC's report *Telecommunications competitive safeguards for 2003–04*.

Finally, to provide a full service bundle, a new entrant would need to arrange contracts for termination services with a variety of parties. At a minimum, this would include Telstra, Optus, Vodafone, Hutchison, intra-capital and inter-regional transmission providers and an international termination service.

The ACCC has previously indicated some concern with the effectiveness of the access regime under Part XIC to deliver timely access outcomes on reasonable terms and conditions. The ACCC must conduct a public inquiry before it can declare a service, a process which generally takes six to 12 months. If the service is declared, access seekers can have the ACCC arbitrate on the terms and conditions of access. Alternatively, the access provider can submit an undertaking which, if accepted, will define the standard terms and conditions of access. The arbitration and undertaking assessment processes can take at least six to 12 months to resolve. In the case of undertakings, the rigidity of the ACCC's requirement to accept/reject means that the assessment process must start again if an undertaking is unacceptable. The cumulative effect of these processes is often a period of years before access issues are decided.

Voice over internet protocol

VoIP refers to the encoding of voice communication into IP packets for transmission over data networks. The transformation of voice into data packets not only enables service providers to offer cheaper prices than for standard telephony services, but also enables greater functionality. The quality of service can vary greatly, depending on the type of VoIP service.

VoIP technology is used in a variety of ways by the industry. The earliest use of VoIP was in the core of carrier networks to transport voice services in a more efficient manner, even where the customer still uses a traditional handset and has no awareness of the technology. This type of use can be expected to increase as the carriers move to an IP core.

However, VoIP is also being used more frequently as a means of transmission all the way to end users. An increasing number of broadband providers are selling a VoIP phone alongside their broadband product. Broadband providers that operate their own network can have some control over the transport of their VoIP traffic and therefore have some control over the quality of their service. Other VoIP service providers such as Skype or engin operate at the application layer only.

Where VoIP technology is used to connect end users, generally a broadband connection is required, which uses either their computer or a special handset. Some VoIP services are equivalent to a standard fixed-line service while others have a more limited function. Variants include:

- on-net services that allow users on the same VoIP network to make and receive calls to each other
- one-way outbound services that enable users to make outgoing calls, including to the PSTN, but do not receive calls from the PSTN
- one-way inbound services that enable users to receive calls from the PSTN but not to make outgoing calls from the PSTN
- two-way services that enable users to make and receive calls from the PSTN.

VoIP service providers originally targeted the large business and corporate sector, although the past few years have seen a much greater focus on small to medium businesses and residential customers.

ACMA reports that there has been a considerable increase in the number of VoIP service providers. The number of service providers offering VoIP services increased from 25 in May 2005 to 170 in June 2006, with an estimated 118 of these providing residential services.[38] ISPs that are currently installing or have installed their own DSLAM infrastructure into telephone exchanges, such as iiNet, are increasingly offering voice services over their own networks.[39]

Despite the increase in the number of VoIP service providers, the ACCC notes that it is premature to consider VoIP services as competitive substitutes to PSTN voice services.[40] At present only 4.8 per cent of Australians use VoIP for phone calls.[41] VoIP services can differ from a standard telephone service in a number of ways, although it is difficult to assess the extent to which these factors contribute to its current low demand. For example, a VoIP service may have limited connectivity with PSTN services, it will not be able to work during a power failure, and it will not automatically provide emergency service operators with information about the location of the caller.

Assessment of competition in local telecommunications

While resellers have made some inroads to Telstra's retail market share in the provision of basic access and local calls, this has been minimal, and there are significant barriers to new entrants obtaining sufficient scale to compete sustainably. Further, the overriding characteristic of the market is that there is still a large degree of reliance on Telstra's network for the provision of local telecommunications services; hence there is very little infrastructure-based competition. These factors combine to provide the major source of Telstra's profitability and market power.

The development of new technologies indicates there is some prospect of access-based competition. In particular, the greater take-up of VoIP in conjunction with DSLAM rollouts is a development that could, in the future, test the dominance of Telstra in local telecommunications. At present there are consumer concerns with respect to the universality, security and quality of VoIP that need to be addressed before it can become a credible threat to Telstra's dominance.

2.3.2 National long-distance, international long-distance and fixed-to-mobile calls

Imputation tests of Telstra's retail and wholesale pricing structures indicate that the provision of local services alone is not a viable strategy. Service providers typically supply local services alongside higher margin services such as national long-distance, international long-distance and FTM calls.

According to the imputation tests conducted on Telstra's pricing for the six months to June 2006, a retailer (that is equally efficient as Telstra's retail business) could earn margins of:

- 70 per cent for domestic long-distance calls for business customers and 69 per cent for

38 ACMA, *Communications report 2005–06*, p. 65.

39 ACMA, *Communications services availability in Australia 2005–06*, p. 32.

40 ACCC, *Local services review*, July 2006, p. 7.

41 ACMA, *Communications report 2005–06*, p. 65.

residential customers

- 60 per cent for international long-distance calls with business customers and 57 per cent with residential customers
- 21 per cent on FTM calls with business customers and 43 per cent for residential customers.[42]

Providers who elect to compete only for long-distance and FTM call services generally compete via one of the following business models:

- as a preselect provider, supplying long-distance and FTM services to a consumer that buys basic access and local calls from another provider
- as an override competitor, offering long-distance and FTM calls to users that are willing to enter an override code
- through calling cards
- VoIP technology as the main vehicle of transmitting voice services.

Each of these strategies requires access to Telstra's PSTN, including where bundled services are provided.

National long-distance and international long-distance competition

A number of carriers provide long-distance calls through preselect arrangements. There are difficulties with competing on a preselection basis because customers who use a different provider for their long-distance services are often charged higher prices for basic access and local calls services than customers that purchase the full range of voice services. Carriers competing by preselect generally have methods to compensate customers for the extra costs associated with line rental.

In the national long-distance segment, calling-card and override competition in national long-distance requires, at a minimum, the purchase of PSTN origination. It therefore relies on the current access pricing regime and is not sustainably competitive in the long-run.

Calling-card and override competition in the international market, however, may take two forms. In one model the competitor buys PSTN origination and provides a traditional circuit switched call. This will be a high-quality call but will rely on the PSTN access pricing regime and is therefore not sustainably competitive. Alternatively a calling-card provider can buy a local call and use a packet switched (usually VoIP) service to provide the call. The local call can be bought from Telstra retail. This option therefore does not rely on regulation and will generally be a more sustainable competitive option. As this option involves relatively low costs of entry, and reduced reliance on Telstra's PSTN, sustainable competition in this segment can be expected to eventuate.

In 2005–06 there was a significant increase in the level of competition coming from VoIP providers, where voice services are carried over broadband access infrastructure. The biggest selling feature of

42 ACCC, *Imputation testing and non-price terms and conditions report relating to the accounting separation of Telstra for September quarter 2006*, December 2006, p. 28.

VoIP is its cheap call rates. VoIP is less reliant on purpose built telephony infrastructure as it transmits voice in data packets over the internet.

The ACCC's report on price changes in 2005–06 showed that the average price of national long-distance calls continued its downward trend.[43] The fall of 6.9 per cent means that national long-distance calls are now 49 per cent lower than 1997–98 levels, when full competition was introduced to the industry.

Prices for international calls have fallen further than prices for national long-distance calls. The average price of international calls fell by 8.8 per cent in 2005–06, and is now 69 per cent lower than what users were paying in 1997–98.

Fixed-to-mobile competition

There are various reasons why the ACCC has concerns about competition in the delivery of calls from FTM phones. Primary among these is the above-cost pricing of the MTAS, which can create a barrier to entry for fixed operators in supplying FTM services. Fixed-only operators must purchase wholesale inputs at prices above cost and compete with integrated carriers that face lower internal transfer prices for calls made between their fixed and mobile networks (on-net calls).

The ACCC estimates that average retail mobile termination prices have been more than doubled their underlying costs for some time, even in the context of lower termination prices.

The ACCC considers that above-cost pricing of FTM services is leading to excessive substitution from fixed lines to mobiles in terms of both subscribers and calls. High FTM prices are inducing more users to rely on mobile-to-mobile (MTM) usage at a higher cost of production. Pricing the MTAS above cost is also likely to accelerate FTM substitution as it provides mobile network operators with a means of inefficiently subsidising mobile handsets.

There are, however, encouraging signs that there may be some increase in competition for FTM services. The ACCC's report on price changes shows that the average price of FTM calls fell by 10.5 per cent in 2005–06, the largest decline of the five PSTN service categories.[44] This continues the declining trend, although FTM prices have not fallen by as much as other call types since the opening up to full competition in 1997–98. There is some indication that FTM pass-through has occurred with Telstra's yields falling from 35.79 cents per minute (cpm) to 33.20 cpm.[45] This in part reflects lower MTAS prices determined in access disputes to be 18 cpm in 2005 and 15 cpm in 2006.[46]

According to Telstra, the growth of the Australian mobile telecommunications market has driven revenue expansion in this product category. But the recent introduction of capped plans in the mobile market has now impacted the volume of FTM activity as customers continue to slowly move their usage from PSTN products.[47] However, FTM traffic has continued to grow in 2005–06 because of the

43 ACCC, *Changes in the prices paid for telecommunications services in Australia 2005–06*.

44 ibid.

45 This number has been derived with reference to call volumes and revenue data contained in Telstra's, *Telstra Corporation Limited and controlled entities results and operations review year ended 30 June 2006*, 10 August 2006, p. 12.

46 The ACCC has published a number of interim determinations from access disputes over the MTAS on its website.

47 Telstra, *Telstra Corporation Limited and controlled entities Results and operations review year ended 30 June 2006*, 10 August 2006, p. 15.

expansionary impact flowing from complementarity between fixed-line calling and the number of mobile subscribers to call.

2.4 Mobile telecommunications services

2.4.1 Wholesale service provision

There are four carriers—Telstra, Optus, Vodafone and Hutchison—that own mobile network infrastructure and provide both wholesale and retail services on their networks.

With four competing networks, the market structure for mobiles is more inclined to deliver competitive outcomes in retail markets than is observed for fixed line services. The exception to this is for the MTAS, where the unique characteristics of the service require regulatory oversight.

The mobile services market also consists of resellers of mobile services, mobile virtual network operators (MVNOs) and retailers. ACMA reported that there were almost 90 resellers of mobile services in 2005.[48] Examples of resellers include:

- Primus Mobile (which resells Telstra services)
- SIMplus (which resells Optus services)
- B Digital (which resells Optus services).

An MVNO differs from a reseller because, in addition to purchasing wholesale mobile capacity from an existing mobile network operator, it provides a technical support layer that replicates the mobile network operator's mobile switching centre. This gives the MVNO more control over the services it can provide to its customers.

Barriers to entry

The ACCC considers that certain barriers to entry in the mobiles market prevents potential entrants from operating as a fully effective constraint on the behaviour of the incumbent mobile network operators. These barriers include the need to provide broad geographic coverage and the high sunk costs associated with owning and building a mobile network.

Mobile operators can achieve broad geographic coverage by entering into voice roaming agreements with incumbent network operators. However, this arrangement enables incumbent network operators to control the new entrant's access to their network and behave in a manner that manages the threat posed by the new entrant.

Even though spectrum costs have fallen over time (given a less active market), establishing base stations and other mobile infrastructure to achieve national geographic coverage involves significant up-front investment by new entrants which are sunk. A mobile operator can reduce commercial risk

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48 Australian Mobile Telecommunications Association, Australian mobile telecommunications industry—economic significance, The Allen Consulting Group, September 2005, p. 9.

by setting up local networks and negotiating domestic roaming arrangements with other network operators. However, the extent of any such reduction will depend on the terms and conditions of any roaming agreements.

The ACCC has indicated its ongoing commitment to the monitoring of the commercial environment to test for the ongoing availability of roaming services and arrangements. Since the mobile services review, the ACCC has not seen a need to take any formal steps towards declaring any other services (other than the continuation of the regulation of the MTAS).[49] The ACCC has maintained that it would only consider such a step after a decision was made to hold a public inquiry. In the event of such a public inquiry, there would need to be an examination of whether any competition issues emerged for 3G roaming services, particularly in remote and regional Australia.[50]

Carriers may also choose to avoid paying for all of the sunk costs associated with investing in infrastructure themselves by entering into infrastructure cost sharing agreements with other mobile operators. During 2004 the ACCC approved 3G network infrastructure cost sharing arrangements between Hutchison and Telstra, and between Optus and Vodafone. Hutchison and Telstra entered into an infrastructure sharing agreement in August 2004 to jointly own Hutchison's 3G network, while Vodafone and Optus launched a joint national 3G network in November 2005.

Mobile termination access service

The domestic MTAS is a declared service that covers the termination of voice calls on all mobile networks. The MTAS is an essential wholesale input used by providers of FTM and MTM calls to allow their customers to call mobile users on a different network. If a call made by a carrier's customer terminates on another mobile network, then that carrier has to pay the other network owner for the use of the MTAS.

There is a separate single market for each mobile network operator's MTAS. Each network operator has monopoly control over allowing outside users to access callers on their network. This control over access gives the network operators sufficient market power to individually set their price for the MTAS. Because network operators are not constrained in their pricing decisions for the MTAS, they have both the ability and incentive to raise the price of the MTAS above its underlying cost of production. The unconstrained power that network operators have in setting MTAS prices has contributed to the high profit levels among the largest network owners.

49 Willett, E. [ACCC Commissioner], 'Understanding competition in the growth of Australian broadband', speech at the Broadbanding Regional Australia 2006 Conference, 21 November 2006, pp. 9–10.

50 ibid. p. 10.

Optus's most recent annual report indicates the mobile segment contributed close to 71 per cent of the Optus Group's operational earnings before interest, taxes and depreciation and amortisation (EBITDA) for the 2005–06 financial year. The report also noted that:

- Mobile revenue grew 3.9 per cent for the year ended 31 March 2006 to $3.9 billion.
- Operational EBITDA fell 3.9 per cent—although it was still $1.4 billion, representing a 37 per cent EBITDA margin.[51]

Telstra's operational review also indicated that its:

- mobile segment revenue increased 6.1 per cent,[52] constituting 22 per cent of Telstra's revenue in 2005–06
- mobile segment generated an EBITDA margin of 41.9 per cent in 2004–05.[53]
- EBITDA margin (excluding wholesale revenues) is higher than Optus's at 42 per cent.[54]

Telstra's mobile revenue has increased as a share of total revenue from 22 per cent in 1998–99 to 33 per cent in 2004–05.[55] Vodafone and Hutchison have also improved their financial performance. Vodafone has continued to post positive profit results in recent years[56] and Hutchison has reduced its operating losses.[57]

As already outlined, high termination costs make it particularly difficult for providers of fixed-line services, such as AAPT and Primus, that do not own mobile networks to compete with fixed-line service providers, such as Optus and Telstra, that do. This is because the high prices that Telstra and Optus charge for terminating calls on their mobile networks gives them a cost advantage for calls made and received on their own networks over carriers who only provide fixed-line services. Higher termination prices also allow mobile network owners to cross-subsidise other services they offer.

These factors led to the ACCC's decision to declare the MTAS in June 2004. At that time, the ACCC also made a pricing principle determination indicating that pricing for the MTAS should follow an adjustment path reflecting a close association between the price and the underlying efficient cost of the service. The ACCC has been involved in several regulatory processes related to this service. In 2005–06 the ACCC's regulatory activities included:

- releasing final assessments for access undertakings submitted by Vodafone, Optus, and Hutchison
- participating in reviews lodged with the tribunal in respect of the Optus and Vodafone undertakings
- arbitrating over 25 MTAS disputes.

51 Singtel, *Singapore Telecommunications Limited and subsidiary companies: management discussion and analysis of unaudited financial condition, results of operations and cash flows for the fourth quarter and year ended 31 March 2006*, p. 43.

52 Telstra, *Telstra Corporation Limited and controlled entities results and operations review—year ended 30 June 2006*, pp. 10, 16.

53 Telstra, *Telstra: the path forward*, 11 August 2005, p. 11.

54 Telstra, *Telstra Corporation Limited and controlled entities results and operations review—year ended 30 June 2006*, p. 5.

55 ibid.

56 Vodafone, *Vodafone Australia Limited annual report for the financial year ended 31 March 2004*, pp. 7, 16; Vodafone, *Vodafone Australia Limited annual report for the financial year ended 31 March 2005*, pp. 7, 17; Vodafone, *Vodafone Australia Limited annual report for the financial year ended 31 March 2006*, pp. 7, 21.

57 Hutchison Telecommunications Australia, *Annual report 2005*, p. 4.

The Federal Court also handed down its decision following an application by Vodafone for a judicial review of the ACCC's pricing principles determination. The court found in favour of the ACCC.[58]

2.4.2 Retail mobile services

The retail mobile services market showed signs of improving competition in 2005–06. Over the past year the mobile market exhibited continued growth in both subscriber numbers and revenue and overall retail prices fell.

The number of mobile services in operation grew by 7 per cent in 2005–06 to 19.76 million.[59] The rate of growth of new subscribers continued to decline, which suggests the market is close to reaching saturation.[60] Competition between providers appears to be driven mainly by churn between existing suppliers rather than growth in the market.

Telstra and Optus have a combined market share of 77 per cent, and the addition of Vodafone's market share means that 94 per cent of the market is concentrated among only three operators.[61] Optus, Vodafone and Hutchison were all able to attract a higher percentage of new customers in 2005–06 than their overall market share.[62] However, the number of new customers in 2005–06 was insufficient for this to have much bearing on overall market shares.

The ACCC's report on price changes showed that the average price of mobile services fell by 6.5 per cent in 2005–06.[63] Price reductions were most evident in post-paid services, particularly post-paid GSM services, for which average prices fell by 10.2 per cent. The larger declines in prices for post-paid services were due to the growing use of capped or bucket plans.

Average revenue per call minute decreased across the industry in 2005–06.[64] Telstra's monthly average revenue per user (ARPU) fell 2.5 per cent to $38.35. The average prepaid revenue per user per month fell 11.4 per cent to $10.85, while average post-paid revenue per user per month was virtually stable at $58.99. Contrasting with this trend, the average mobile data revenue per user per month increased 18.8 per cent to $6.77.[65]

The ACCC continues to monitor retail prices in the FTM market. The retail prices of FTM calls fell 10.5 per cent in 2005–06.[66] While this continues the trend of lower FTM prices, the ACCC remains concerned that users are paying well in excess of the actual cost of an FTM call. This may be partly attributed to the high wholesale MTAS charges faced by fixed-line service providers for terminating on a mobile network.

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58 *Vodafone Australia Limited v. Australian Competition & Consumer Commission* [2005] FCA 1294, 16 September 2005.

59 ACMA, *Communications report 2005–06*, 2006, p. 27.

60 ibid, p. 60.

61 ibid.

62 ibid.

63 ACCC, *Changes in the prices paid for telecommunications services in Australia 2005–06*.

64 *Vodafone Australia Limited v. Australian Competition & Consumer Commission* [2005] FCA 1294, 16 September 2005.

65 Telstra, *Annual report 2006*, p. 16.

66 ACCC, *Changes in the prices paid for telecommunications services in Australia 2005–06*.

New services delivered over 3G networks

Australian consumers and businesses seem to be making a gradual transition toward consuming innovative mobile broadband services due to the development of 3G networks.

All mobile network operators have developed 3G network infrastructure and services to meet the demand for enhanced mobile services. The most significant of these investments has been Telstra's NextG, which was launched in October 2006. The 3GSM network operates in the 850 MHz frequency and provides voice and mobile broadband services to 98 per cent of the population.[67] The network uses high speed downlink packet access (HSDPA) technology, which Telstra claims is up to 50 times faster than dial-up and up to five times faster than other 3GSM networks. Initial download speeds were claimed to average from 550 Kbps to 1.5 Mbps, with peak network speeds of up to 3.6 Mbps. Telstra has stated that these speeds will increase as the network is upgraded in 2007. The NextG network is to replace Telstra's CDMA network, which will be shut down from 1 January 2008.

The other network operators are also placing their focus on 3G services. In May 2006, Hutchison announced that it will be moving its 2G customers to its 3G shared network and switching off its CDMA network.[68] During 2005–06 Optus indicated that it would deploy more than 2000 base stations for the provision of 3G services, covering the six major capital cities by March 2007.[69]

The deployment of these networks has progressed, reflecting growth in the consumer take-up of 3G services in 2005–06. This is exemplified by the growth in industry revenue in 2005–06 of 7.5 per cent for 2G services compared with a 125 per cent increase for 3G services.[70] Telstra data shows that revenue from SMS and MMS data services increased 8.1 per cent[71] but that other mobile data services revenue increased substantially by close to 120 per cent, albeit off a low base of $84 million.[72] Together SMS and other data services represent close to 14 per cent of Telstra's mobile segment revenue.[73]

The growth of 3G mobile services creates both opportunities and challenges for competition. The growth of 3G offers a host of new value-added services to users, which the ACCC is keen to encourage. Developments in relation to 3G infrastructure and the networks on which 3G services are delivered and the nature of control of content of those 3G services both have important competitive implications for the future.

While it is likely that voice calls will continue to be the main service provided over 3G networks in the short term, the success of 3G mobile networks in the long term is likely to depend on the availability of compelling content to make full use of the higher bandwidth provided. Should individual competitors be able to obtain exclusive agreements on a large share of popular content, it is possible that they will wield substantial market power over mobile services and that competition in 3G mobile

67 Telstra, 'Telstra's turbo-charged, nationwide mobile broadband network goes live', media release, 6 October 2006.

68 Hutchison, *Hutchison Telecoms records mass 2G to 3G upgrades,* ASX media release, May 2006.

69 ACCC, *Optus's undertaking with respect to the supply of its domestic GSM terminating access service (DGTAS)*, Final decision, February 2006.

70 ibid, p. 211.

71 Telstra, *Telstra Corporation Limited and controlled entities results and operations review year ended 30 June 2006*, 10 August 2006, p. 18.

72 ibid, p. 16.

73 ibid, p. 16. This is derived from revenue for SMS and other mobile data services.

services may suffer. The potential for this kind of market domination is even greater when there is an integrated provider that supplies 3G, broadband, and pay television.

The potential for anti-competitive use of exclusive content will depend on whether there are significant switching costs associated with using more than one network, the availability of demand and the supply-side substitutes for the content and whether the content is valued by a sufficient portion of the market. Using these criteria, the ACCC considers that there are only a small number of services that may pose difficulties for 3G services.

2.5 Internet and data services

2.5.1 Wholesale service provision

Recent rapid growth in the internet sector has largely been driven by broadband investment. This growth comes in light of a general shift away from data provided over the voice band (dial-up) to an emphasis on broadband and the services that flow from it.

Australia is more reliant on xDSL technology—delivered over Telstra's copper network—than other countries. The smaller significance of cable broadband subscriptions in Australia is partly due to Telstra owning both the near ubiquitous copper network and the largest HFC network, a situation which prevents competitive pressure between the two technologies from developing to the extent seen in other countries. About 80 per cent of Australian broadband subscribers use a form of xDSL, well above the OECD average of 63 per cent.[74] ADSL is by far the most widely used broadband technology nationally. The second most common broadband platform is HFC cable, with 17 per cent of subscribers, while three per cent of subscribers use other technologies.

In November 2006 Telstra announced plans to offer ADSL2+ services in exchanges where competitors are also offering ADSL2+ services. Telstra also announced that it would commence retailing and wholesaling ADSL plans at speeds of up to 8 Mbps where ADSL2+ services are not available. Prior to these announcements Telstra capped the speed of its ADSL services to a maximum of 1.5 Mbps to its customers. These restrictions also applied to wholesale ISP customers of Telstra services.

Subsidy programs such as Broadband Connect, Networking the Nation and Metro Broadband Connect are designed to encourage the entry of new competitive infrastructure into less populated areas of Australia, particularly in broadband internet.

On 7 March 2006 the Australian Government announced the introduction of the Australian Broadband Guarantee. Designed to fill in any remaining broadband black spots across Australia, the guarantee is part of the transition to the Broadband Connect Infrastructure Program.

The infrastructure program seeks to further develop sustainable broadband infrastructure across Australia. With funding of $600 million, the Broadband Connect Infrastructure Program will aid in the rollout of open access broadband networks in regional, rural and remote Australia, making possible the deployment of higher speed broadband.

74 OECD, *OECD broadband statistics to June 2006*, 13 October 2006.

Wireless networks

Alternative networks based on fixed wireless technologies have emerged in recent years. While the capacity of wireless networks may not match that possible from wireline networks, they can be rolled out relatively quickly and cheaply because they do not involve laying cable or copper wire. Wireless network operators do not require customers to purchase a fixed telephone line to access a broadband service, and are therefore attractive for users relying on a mobile phone for their telephony.

An increasing number of carriers are using wireless technologies to provide high-speed wireless services to regional centres, such as Toowoomba, Dubbo and Kalgoorlie. This trend has been assisted through government funding under the Higher Bandwidth Incentive Scheme (HiBIS). HiBIS ended on 31 December 2005 and was replaced by the Broadband Connect program, which commenced on 1 January 2006. Wireless broadband accounts for the majority of regional broadband network operations, with 41 of the registered Broadband Connect providers using wireless technologies to deliver their services.[75]

Fixed wireless is also being used to provide access to high-speed data services in metropolitan areas with Personal Broadband Australia (PBA) and Unwired, two of the larger providers. PBA's iBurst network covers Sydney, Melbourne, Brisbane, Adelaide, Perth, Gold Coast and Canberra. The completed network is expected to provide coverage to 75 per cent of the population.[76] Unwired, which provides a nomadic/portable—as opposed to a fully mobile network—has deployed networks in Sydney and more recently in the inner metropolitan areas of Melbourne. Both the Unwired and iBurst service are supplied over proprietary networks.

The four mobile phone carriers are also promoting internet services and claim to offer broadband speeds, utilising a combination of 2.5G and 3G carrier networks. On 6 October 2006, Telstra launched its own 3G network. Promoted by Telstra as NextG, the network will replace coverage of its CDMA mobile network. Despite the arrival of wireless internet services, these developments are in their early stages. Furthermore, it is still unclear as to whether these new networks can viably compete with broadband services delivered over the existing fixed-line network.

Fibre networks

Optic fibre offers the potential to substantially increase the speed and reliability of a connection between the local exchange and the end user, thus significantly enhancing the quality of broadband services compared to those provided over the copper local loop.

Fibre networks can take various forms, including FTTH and FTTN. FTTH provides a new end-to-end fibre network to the customer's premises, bypassing the existing copper network. By contrast, FTTN upgrades the copper network, providing fibre up to a local street-corner node but still using copper from the node to the premises. Research done by Ovum for the ACCC indicates that FTTH plans tend to emerge in countries such as the United States with strong infrastructure competition between telephone and cable television companies, or where there have been government subsidies such

75 ibid, p. 25.

76 www.iburst.com.au, accessed on 2 February 2007.

as Japan and Sweden. FTTN plans have been less common to date and have generally emerged in countries such as Germany and Australia that rely more on ULL access for broadband competition.

Depending on the precise configuration of such a development, there may be significant implications for access seekers who use ULLS or LSS in conjunction with their own DSLAM equipment in local exchanges.

In November 2005 Telstra announced plans for the deployment of an FTTN network providing a minimum of 12 Mbps to households and businesses in the five largest Australian capital cities. Telstra had discussions with the ACCC over mechanisms for enabling competitors to access the proposed FTTN network and for Telstra to receive an appropriate return on investment. Telstra withdrew the proposal in August 2006 without lodging a formal access undertaking with the ACCC. A second proposal for an FTTN upgrade has also been raised by a group of nine carriers, with the G9 group continuing to discuss the regulatory implications with the ACCC in early 2007.

ULLS and LSS based competition

Several carriers have taken up ULLS or LSS and installed their own DSLAMs for the provision of xDSL services over the 2005–06 financial year. Greater broadband use and take-up has encouraged ISPs to go beyond reselling Telstra's wholesale services and proceed with new broadband infrastructure rollouts. These network investments have been driven by a combination of ISPs reaching sufficient customer density thresholds in exchanges through the resale of ADSL, a reduction in ULLS and LSS prices as determined in access disputes, and falling equipment prices.[77]

ACMA identified 19 ISPs that were deploying their own DSLAM infrastructure during the 2005–06 reporting period. This is an increase from the nine ISPs identified with infrastructure deployments in 2004–05.[78]

The most extensive rollouts have emerged from Optus, iiNet, Primus, and PowerTel. Optus had installed about 100 DSLAMs by April 2006, with the intention of extending to 340 exchanges by early 2007. By June 2006, iiNet had installed DSLAMs into 245 exchanges and migrated about 100 000 of its resale customers onto its own network. iiNet has publicly stated it aims to cover 90 per cent of the Australian metropolitan population by January 2007. Primus has deployed about 182 DSLAMs, and PowerTel 126.[79]

In 2006, iiNet, PowerTel, Optus, NEXTEP and Agile were in the process of actively wholesaling or establishing commercial arrangements for wholesaling their ADSL2+ networks to other ISPs.[80] This use of ULLS access has the potential to deliver wholesale infrastructure competition in the broadband market. By offering wholesale services, these carriers will be better able to recoup the costs of the investment and will have the likely effect of reducing wholesale prices for resellers.Installation of DSLAM infrastructure was made possible through the ACCC's declaration of the ULLS in 1999 and the LSS in 2002. The ACCC seeks to ensure that carriers have access to these services at prices that reflect costs.

77 Telstra, *Annual report 2006*, p. 23.

78 ACMA, *Communications services availability 2005–06*, 2006, p. 8.

79 ibid, p. 13.

80 ibid, p. 14.

2.5.2 Retail service provision

The number of ISPs in Australia continues to decline as rationalisation takes place. ISP numbers fell from 689 in March 2005 to 467 in September 2006.[81] The reduction in ISPs occurred mainly at the smaller end of the market. The number of very small, small and medium sized ISPs (10 000 or fewer subscribers) fell by 33 per cent, compared to a 12 per cent decline in the number of large ISPs (between 10 001 and 100 000 subscribers). The number of very large ISPs (more than 100 000 subscribers) remained at 10.

The number of subscribers with very large ISPs continues to increase, whether this is due to changing customer preference or the consolidation of smaller ISPs. Very large ISPs increased their market share from 77 per cent in March 2005 to 82 per cent in September 2006.

Retail broadband competition, mainly through ADSL services, has largely been driven by an increasing number of providers reselling Telstra's wholesale services. Since 2002, the market share of DSL resellers has been growing steadily, spurring the overall strong growth of broadband take-up that emerged during 2004–05.[82] While Telstra's competitors obtained shares of the growing broadband market, the overall shift from dial-up to broadband is also assisting Telstra, which has been successful in acquiring a significant share of new broadband customer acquisitions.

Network deployments are helping to provide greater bandwidth to Australian broadband users, with ISPs increasingly deploying ADSL2+ broadband services capable of delivering speeds as high as 20 Mbps under optimal conditions to end-users who live close to their exchange. Consumers and businesses in metropolitan areas are now able to access bandwidth well in excess of the 1.5 Mbps to which they may have previously been limited.

The ACCC reported that there were 3 518 100 broadband services in operation in June 2006, which represents an increase of 67 per cent on the previous year.[83] According to the Australian Bureau of Statistics' survey of ISPs, there were around 6 657 000 active internet subscribers in Australia at the end of September 2006, comprised of 5 831 000 household subscribers and 826 000 business and government subscribers. The number of dial-up subscribers was 2 749 000, compared with 3 908 000 non dial-up subscribers recorded at the end of June 2006.[84]

2.6 Competition in corporate markets

In developing its series of reports on competition in the corporate customer segment, the ACCC has defined corporate customers to be the top 1200 corporations operating in Australia by revenue, plus government entities with telecommunications contracts in excess of $2 million.

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81 Australian Bureau of Statistics, *Internet activity survey: September 2006*, February 2007.

82 ACMA, *Telecommunications performance report 2005–05*, 2006, p. 23.

83 ACCC, *Snapshot of broadband deployment as at 30 June 2006*, 14 September 2006.

84 Australian Bureau of Statistics, *Internet activity survey: September 2006*, February 2007.

Corporate customers are large entities that procure fixed voice services, mobile services, data and potentially managed services, which may be acquired as whole-of-business or whole-of-government packages. They generally have multisite operations, large telecommunications expenditure and complex communications requirements involving a range of voice and data services. The supply, particularly to premises with higher telecommunications demands, may occur via different technologies, such as digital network, direct fibre connections and packet based networks (usually via PABX). However, some corporate premises may obtain supply through methods that are commonly used to supply residential and smaller businesses such as broadband access. Increasingly, corporate customers are acquiring VoIP services. Corporate customers generally procure telecommunication services through tenders and multistage bidding processes.

The ACCC notes that, in terms of price trends only, it appears that presently there is vigorous competition in the supply of telecommunications services to the corporate customer segment. Prices have continued to fall for the cluster of fixed and mobile voice services and substantial discounts continue to be offered to the standard retail rates.[85]

The ACCC has separately recommended that businesses with more than five fixed lines be removed from price controls, partly as a result of price competition and partly from the emergence of infrastructure competition in CBD areas. Nonetheless the ACCC recommended that the wholesale component of line rental be retained in the price control baskets to ensure that Telstra does not discriminate against its competitors for business customers.

In May 2006 the ACCC released its third report concerning competition in corporate markets.[86] The ACCC notes in this report that it currently does not possess detailed and regular information on the supply of services to the corporate customer segment. Such information only appears to be accessible from confidential supply agreements between carriers and corporate customers. Accordingly, the ACCC had proposed to implement record-keeping rules (RKRs) to enable a sufficient gathering of data on competition in corporate markets. However, the RKRs have been deferred due to the implementation of the operational separation regime for Telstra. In the absence of RKRs the ACCC has circulated a pilot survey to a cross-section of corporations and government agencies to gain a better understanding of the corporate customer market. The survey was conducted in January 2006 and the survey questions can be viewed in the ACCC's third report into competition in corporate markets.[87]

The survey sought information from respondents on:

- their telecommunications needs
- the ability of the telecommunications industry to meet those needs
- the risks associated with changing providers
- the nature of the contracts struck between the segment and the industry.

85 ACCC, *Competition in the corporate customer segment of the telecommunications industry: January–December 2005*, May 2006, p. 22.

86 ibid.

87 ibid, pp. 25–33.

The ACCC notes that the results from the survey sufficiently reflect the circumstances corporate customers face to justify some tentative conclusions about the competitiveness of supply to the segment.

The survey notes that the corporate customer segment is not free of impediments to consumer welfare. This is evident from a seeming mismatch between customer requirements and actual supply of services, given the increasing importance of controlling communications traffic and using international conferencing to corporate customers. Another factor that may impede consumer welfare benefits in the corporate market is inflated switching costs, which contribute to a reluctance to churn between corporate providers. Switching costs also appear to contribute to the trend of increased revenue shares to Telstra and Optus. These impediments to the consumer welfare of corporate customers appear to be in addition to Telstra's advantage by virtue of its national network coverage.

The survey notes that corporate customers appear to be sufficiently knowledgeable and well resourced to ensure that meaningful negotiations occur for the supply of telecommunication services. However, there appears to be a premium placed by corporate customers on switching costs that may be contributing to a reluctance to switch between providers after negotiations have been completed. Accordingly, it appears that Telstra and Optus may be the main beneficiaries of this premium as they continue to grow their revenues from the corporate customer segment while other suppliers have reported losses or minimal revenue growth.

3 Anti-competitive conduct provisions

This section examines activities undertaken by the ACCC in 2005–06 in relation to the telecommunications-specific and general anti-competitive provisions of the TPA.

Part XIB of the TPA comprises telecommunications-specific anti-competitive conduct provisions. These provisions prohibit a carrier or carriage service provider (CSP) from engaging in anti-competitive conduct—a prohibition known as the competition rule. Section 151AJ sets out the two circumstances under which a carrier or a CSP contravenes the competition rule.

The first circumstance is when a carrier or CSP takes advantage of a substantial degree of power in a telecommunications market with the effect, or likely effect, of substantially lessening competition in that, or any other, telecommunications market. An examination of the purpose of the conduct is not required under the competition rule—unlike the general s. 46 misuse of market power provisions.

The second circumstance is when a carrier or CSP engages in conduct relating to a telecommunications market that contravenes the general anti-competitive conduct provisions in Part IV of the TPA, in particular:

- s. 45—contracts, arrangements or understandings that restrict dealings or affect competition
- s. 45B—covenants affecting competition
- s. 46—misuse of market power
- s. 47—exclusive dealing
- s. 48—resale price maintenance.

3.1 Investigations conducted in 2005–06

During 2005–06 the ACCC conducted 11 investigations into anti-competitive conduct, including the following:

- alleged anti-competitive conduct in relation to the wholesale and retail pricing of line rental (see 3.1.2)
- alleged anti-competitive conduct in relation to the retail and wholesale pricing for bundled services, including broadband, local call services and long-distance call services
- carriers introducing new retail products to the market before they are — or without making them—available to their wholesale customers
- carriers denying or restricting access to retail mobile services used in conjunction with fixed cellular terminals

- alleged resale price maintenance in relation to wireless broadband services
- alleged anti-competitive conduct in relation to corporate and government telecommunications services
- alleged anti-competitive conduct in relation to wholesale business grade xDSL technology.

Nine investigations were concluded in the 2005–06 financial year. In relation to some of these investigations, the alleged conduct either ceased or changed following the ACCC's inquiries. In other investigations, the ACCC's inquiries suggested that there was insufficient material to substantiate the alleged conduct.

3.1.1 Competition and advisory notices

The ACCC may issue competition notices in response to alleged anti-competitive conduct when it has 'reason to believe' that there has been a contravention of the competition rule.

When exercising this discretion the ACCC must consider the guidelines it has issued under s. 151AP(2) of the TPA and any other matters it considers relevant.

Two different types of competition notices can be issued by the ACCC when it has reason to believe that a carrier or CSP has engaged, or is engaging, in anti-competitive conduct. This threshold does not require the ACCC to have satisfaction that this is the case, instead the part A competition notice serves as a warning that the ACCC has competition concerns in relation to a carrier or CSP's conduct and that further investigation of this conduct is required.

A key objective of a part A competition notice is that once it is issued it enables affected third parties to take their own damages actions in the Federal Court. At the same time, a part A competition notice aims to encourage the carrier or CSP to change its conduct and gives the ACCC the option to take an action for penalties against the carrier or CSP in the Federal Court, if such action is deemed to be necessary. The relevant penalties that can be sought by the ACCC in the Federal Court are the sum of $10 million and $1 million for each day that the contravention continued. If the contravention continued for more than 21 days, penalties for the sum of $31 million and $3 million for each day over 21 days can be sought.

A part B competition notice can be issued by the ACCC to a carrier or CSP when the ACCC has reason to believe that the carrier or CSP has committed, or is committing, the contravention. Once issued, a part B competition notice reverses the onus of proof in relation to matters in the notice (that is, it is prima facie evidence of the contravention if proceedings are subsequently brought under Part XIB).

The ACCC may also issue a notice advising a carrier or CSP of the action that it should take or consider taking, to ensure that it does not engage, or continue to engage, in anti-competitive conduct. This is known as an advisory notice.

3.1.2 Part A competition notice issued to Telstra for Home Access and HomeLine Part line rental price increases

In December 2005, Telstra increased the price for its wholesale line rental product known as Home Access and its retail line rental product known as HomeLine Part. The Home Access product is an input used by Telstra's wholesale customers to provide retail fixed-voice services to residential customers. The HomeLine Part product is a preselect product that provides Telstra line rental and local calls to retail customers that are then able to purchase preselect long-distance, international and fixed-to-mobile call services from another carrier or CSP.

On 12 April 2006, the ACCC issued a part A competition notice in relation to Telstra's Home Access and HomeLine Part line rental price increases.[88] The part A competition notice was issued to Telstra as the ACCC had reached the requisite 'reason to believe' threshold. The allegations in the notice did not involve a straightforward breach of the law. Instead, the allegations were of a complex taking advantage of market power—one which involved a price squeeze across a subset of customers (lower spend customers) whose value to service providers was not intuitively apparent. The alleged effects or likely effects included:

- preventing or hindering Telstra's retail competitors from competing for lower spend customers
- raising the costs of Telstra's retail competitors and reducing the incentives of Telstra's retail competitors to compete for new or existing customers
- increasing the barriers to entry in the retail fixed-voice services market.

Investigating alleged price squeezes is a highly involved process, involving the collection and analysis of extensive costing, pricing and other material from industry participants, and assessing that material against the complex economics and jurisprudence relating to misuse of market power and the lessening of competition. In this case it also involved questions of degree about the softening of competition and about the factors which facilitate longer term investment.

Importantly, the part A competition notice had the effect of activating third party rights as Telstra's wholesale customers could not institute an action for damages for contravention of the competition rule unless a notice was in force.

After the ACCC conducted a comprehensive investigation into Telstra's conduct and its effects—particularly taking into consideration the changed regulatory circumstances with the declaration of the wholesale line rental service—the ACCC decided that it was no longer necessary to keep the notice in force. On 2 March 2007, the ACCC revoked the competition notice.

This decision followed consultation with industry about developments since the service was declared, and the ACCC also took into account some changed market circumstances that were reported in this consultation.

88 On 2 March 2007, the ACCC lifted the part competitive notice issued to Telstra in light of the changing regulatory circumstances, including the declaration of the wholesale line rental service. Further information will be provided on this in the telecommunications competitive safeguards report for 2006–07.

3.2 Exemption orders

A carrier or CSP proposing to engage in conduct that may normally breach the competition rule can apply to the ACCC for an exemption order.

The ACCC may grant an exemption order if it is satisfied that:

- the resulting public benefit outweighs any public detriment of lessened competition
- the conduct will not breach the competition rule.

Conduct subject to an exemption order will not be anti-competitive for the purpose of the competition rule.

The ACCC has never received an application for a competition rule exemption.

3.3 Third line force notifications

Third line forcing is a specific form of exclusive dealing and is prohibited under ss. 46(6) and 46(7) of the TPA. Businesses may seek immunity from court action under the notification process in the TPA.

Under the notification process, immunity from court action for third line forcing conduct arises automatically 14 days after lodgment and continues unless, and until, the ACCC issues a notice removing the immunity.

The ACCC may remove immunity if it is satisfied that the likely benefit to the public would not outweigh the likely detriment of the proposed conduct.

While the ACCC received a number of third line forcing notifications from participants in the telecommunications industry in 2005–06, these related to minor matters.

4 Consumer safeguard provisions

This section details major ACCC investigations of potential telecommunications breaches of the consumer protection provisions in Part V of the TPA. The TPA does not contain consumer protection provisions specific to the telecommunications market.

A total of 3117 consumer protection complaints about the telecommunications industry were registered with the ACCC in 2005–06. There were 4403 in the previous financial year. Of the complaints received, about 28 per cent did not fall within the ACCC's jurisdiction.

Each complaint received does not necessarily represent a single issue. Usually there are several key issues per year that generate most complaints and therefore several hundred complaints may relate to one issue.

Many of the issues identified were resolved through initial ACCC investigations or by initial ACCC contact with the relevant parties.

4.1 Investigations progressed

Twelve consumer protection matters were progressed during the reporting period, including those outlined below.

Global Pre Paid Communications Pty Ltd

On 24 February 2006, the Federal Court ordered that 23 small businesses receive compensation totalling more than $3.5 million following ACCC action against Global Pre Paid Communications Pty Ltd (in liquidation), In-Touch Networks Pty Ltd (in liquidation) and the companies' representatives.

The ACCC alleged that Global Pre Paid and In-Touch had misled businesses about the profitability and operations of prepaid phone card and vending machine distributorships.

The court found that Global Pre Paid and In-Touch and representatives, Mr Nicholas Yates, Mr Frank Yates, Mr Nicholas Rhodin, Mr Russell Fielding and Mr Daniel Albert, repeatedly engaged in misleading and deceptive conduct when dealing with small business investors.

The court declared that Global Pre Paid, In-Touch and the five named individuals contravened s. 52 of the TPA and ordered:

- a range of injunctions to prevent the respondents engaging in unlawful conduct in future
- a total of $3 538 243.94 in compensation to be paid to 23 small businesses
- the respondents (other than Global Pre-Paid and In-Touch) to pay the ACCC's costs.

Two of the respondents lodged appeals against the judgment but the appeals were dismissed either for the appellants' failure to follow court directions for the appeal or the appellant's failure to attend a hearing relating to the appeal.

SingTel Optus Pty Ltd

In July 2005, the ACCC began investigating allegations that consumers and businesses had been misled about the contents of Motorola E398 mobile phone kits purchased from Optus. It was alleged that kits purchased between April 2005 and November 2005 did not contain all of the accessories that were illustrated on the packaging, including a TransFlash, a USB cable and a mobile phone CD.

After the ACCC raised this issue with Optus, Optus agreed to notify customers who purchased the Motorola E398 mobile phone kit during this time period with an SMS text message advising that Optus would provide these particular accessories free of charge. In addition, misled customers who had already purchased these accessories separately were to be provided with call credits to the value of the accessories. Optus set up a web page to inform affected customers about this offer.

Dataline.net.au

On 3 November 2006, the Federal Court declared that Dataline.net.au Pty Ltd and World Publishing Systems Pty Ltd had engaged in unconscionable, misleading and deceptive conduct in connection with the supply of internet related services to small businesses and consumers throughout Australia. The ACCC instituted proceedings against Dataline and others in 2002.

Dataline (in liquidation) was in the business of wholesaling internet provider services to small businesses called virtual internet service providers (VISPs) for resale by the VISPs to retail customers. Australis Internet Pty Ltd (in liquidation) was related to Dataline and was a VISP retailing internet services.

The court declared that Australis and World Publishing Systems engaged in misleading and deceptive conduct and that Mr John Russell, managing director of Dataline and Australis, was knowingly concerned in the contraventions by all three companies. The court restrained Mr Russell from engaging in resale price maintenance and imposed a pecuniary penalty in respect of the resale price maintenance conduct. Former staff members of Dataline also consented to declarations that they were knowingly concerned in misleading and deceptive conduct by Dataline.

The court declined to impose pecuniary penalties on the corporate respondents, which were in liquidation, in relation to the resale price maintenance conduct. The court also decided against granting injunctions that restrained Mr Russell from engaging in unconscionable conduct and misleading and deceptive conduct as sought by the ACCC. The ACCC has appealed those decisions.

5 Tariff filing, record keeping, monitoring and reporting

In addition to its general powers to obtain information under s. 155, the ACCC has telecommunications-specific information-gathering powers under Part XIB of the TPA. These powers, including tariff-filing provisions and the power to make record-keeping rules, allow the ACCC to monitor the pricing conduct of carriers and CSPs when determining appropriate access prices or to assess concerns about anti-competitive conduct.

The information-gathering powers enable the ACCC to monitor market behaviour in the telecommunications industry and develop appropriate regulatory responses. The Minister for Communications, Information Technology and the Arts (the minister) can also require that the ACCC monitor and report on various aspects of competition within the industry.

5.1 Tariff filing

The ACCC's tariff-filing powers can be divided into two distinct parts:

- general telecommunications tariff filing (Part XIB, Division 4)
- Telstra-specific tariff filing (Part XIB, Division 5).

5.1.1 Tariff-filing directions under Part XIB, Division 4

If the ACCC is satisfied that a carrier or CSP has a substantial degree of market power in a telecommunications market, it may direct them under Part XIB, Division 4 to provide information on charges for specified carriage services and/or ancillary goods and services or information on its intentions regarding those goods or services.

In the 2005–06 financial year the ACCC did not issue any tariff filing directions under this division.

5.1.2 Tariff filing by Telstra under Part XIB, Division 5

Part XIB, Division 5 requires Telstra to give the ACCC a written statement setting out any proposed pricing changes for basic carriage services seven days before the change occurs. Basic carriage services are those that allow for communication between two or more distinct places, supplied by fixed-line or satellite-based facilities, but do not include the supply of customer equipment.

A strict interpretation of Division 5 would require Telstra to provide complete details of all offerings, both standard and individualised (non-standard), along with all variations. To reduce the administrative burden of this requirement on both the ACCC and Telstra, the ACCC and Telstra agreed in June 1998 that relevant information would be provided only for those basic carriage services that were identified by the ACCC as assisting it in detecting potential anti-competitive behaviour.

Under the agreement:

- Telstra is to provide its standard form of agreement on a weekly basis, along with a list of all amendments (additions, variations and withdrawals) that have taken place during that week.
- Telstra is to provide a monthly summary report of any non-standard form of agreements that it entered into for that calendar month.
- Telstra is to brief the ACCC if it has introduced, varied or withdrawn an offering for a basic carrier service (BCS) and considers that change to be significant.
- The ACCC may also request a briefing to obtain information about any amendments to Telstra's standard form of agreement or about a non-standard form of agreement.

Exemptions exist for particular BCSs when:

- there is a limited likelihood for anti-competitive conduct
- information is already available to the ACCC through the access regime
- information is otherwise available from the previous tariff-filing agreement between Telstra and Austel.

During 2005–06 Telstra complied with the requirements to give the ACCC tariff-filing information.

5.2 Telstra's compliance with its retail price control arrangements

Since 1989, Telstra has been subject to retail price control arrangements that are set by government. These arrangements were most recently amended by government on 1 January 2006, and are designed to better ensure that users share in efficiency improvements for services that are not yet competitive.

Under the retail price control arrangements, the ACCC is responsible for developing a methodology by which to measure price changes, assess the accuracy and completeness of Telstra's report, and report annually to the minister on the adequacy of Telstra's compliance.

In November 2006 the ACCC issued its latest assessment of Telstra's compliance with its retail price control arrangements, covering the six months from July to December 2005. The ACCC was satisfied that Telstra had adequately complied with its price control arrangements.

The price control arrangements for the period included separate price caps on three baskets of services:

These caps apply to the weighted average prices of the services in the baskets as supplied to all Telstra's retail customers. These price control arrangements also required untimed local call charges to be broadly similar for both metropolitan and non-metropolitan users and for Telstra to comply with a number of other specific pricing and notification requirements.

5.3 Record-keeping rules

Under s. 151BU in Part XIB the ACCC has the power to make a record-keeping rule (RKR) by written instrument and to require that carriers and CSPs comply with it. The rule may specify what records are kept, how reports are prepared and when these reports are to be provided. The ACCC cannot require the keeping of records unless they contain information relevant to its responsibilities.

5.3.1 Record-keeping rules in relation to the Division 12 report

In December 2004 the ACCC issued an RKR specifying information be provided by telecommunications carriers and CSPs to the ACCC for its annual Division 12 report. Under Part XIB, Division 12, s. 151CM(1)(a) the ACCC is required to monitor and report each financial year on charges paid by users of telecommunications services.

Carriers and CSPs reporting under the Division 12 RKR are Telstra, SingTel Optus, AAPT, Primus, Hutchison, Vodafone, Virgin Mobile MCI Worldcom and iiNet. These carriers and service providers submit revenue, usage and other information to the ACCC about the services they provide to customers which the ACCC then uses to construct price indexes to estimate changes in the prices paid by users of telecommunications services.

The ACCC has continued to work with reporting carriers to promote the timeliness and completeness of their reports.

5.3.2 Accounting separation

In December 2002 the government made provision for an enhanced accounting separation of Telstra's wholesale and retail operations with the passage of the *Telecommunications Competition Act 2002*. In accordance with this Act, the minister issued a direction on 19 June 2003 instructing the ACCC to issue RKRs requiring Telstra to provide the ACCC with reports on:

- current costs in addition to historical costs under the telecommunications industry accounting framework (CCA reports)
- imputation analysis comparing Telstra's retail prices and the costs faced by access seekers in buying core telecommunications services (fixed network originating and terminating access, wholesale local calls and the ULLS) from Telstra (imputation reports)
- key performance indicators on non-price terms and conditions (NPTC) that compare Telstra's customer service performance between specified retail and wholesale supplied services (NPTC reports).

The ACCC issued revised RKRs in September 2004 in consultation with Telstra and the industry more broadly. These replaced the initial RKRs issued during 2003 which had been framed to accommodate what could be readily achieved using existing Telstra data and information systems.

It is a requirement of the direction that the reports be made available to the public.

The ACCC reports on a six monthly basis on CCA, and quarterly on imputation and NPTC. The direction also requires the ACCC to provide the minister with a six-monthly report on competition in the corporate customer segment of the telecommunications market. This report is subject to a separate process (see 5.4.1).

5.3.3 Public disclosure of market indicator data

In 2001 the ACCC introduced the telecommunications regulatory accounting framework (RAF), a vertical and horizontal accounting separation model that requires revenue and cost information for wholesale and retail services to be reported to the ACCC. The RAF also requires that service usage information, such as the number of local calls and the number of national long-distance minutes, be reported.

In October 2003 the ACCC amended the RAF to improve the robustness and transparency of the reports. The amendments related to the notification required by the ACCC for changes to the RAF reports, the audit requirements and auditor standards for audit reports and the treatment of related entities for reporting under the RKR.

The ACCC commenced publishing extracts of the RAF data in market indicator reports.

The published information includes revenues, usage and market share information on a range of retail and wholesale telecommunications services. This information was released in accordance with the approach detailed in the ACCC's disclosure report for RKR information, issued in January 2003.

The ACCC released a market indicator report for 2004–05 in July 2006.

5.3.4 Internet interconnection record-keeping rule

Internet interconnection is the manner in which ISPs connect to each other's backbone networks and transfer internet traffic between them.

In March 2005 the ACCC issued an RKR and a disclosure direction to 19 leading ISPs as part of a three-year monitoring regime of internet interconnection services.

The monitoring program is aimed at identifying how interconnection of internet networks works in practice, and what affects that has on the markets that rely on interconnection.

The ACCC's RKR followed its decision in January 2005 not to declare an internet interconnection service. The ACCC will be reviewing the effectiveness of the RKR in early 2007.

5.3.5 Bundling record-keeping rule

In March 2003 the ACCC issued an RKR to Telstra seeking information on the effects of bundling on competition in telecommunications markets requiring Telstra to provide detailed information about its Rewards and HomeLine residential packages. At that time, the ACCC did not issue the final report format pursuant to the RKR as it was recognised that Telstra may need to implement system changes in order to more easily meet the ongoing reporting requirements. Instead, an interim reporting format was developed in consultation with Telstra.

Since then Telstra has been providing data each quarter to the ACCC in connection with these bundled products. While the information provided by Telstra gives an indication of the extent to which bundled service offerings have been taken up by Telstra residential customers, it does not allow the ACCC to quantify the percentage of discounts afforded to Telstra customers who avail themselves of bundled service offerings. Without this additional data it is difficult to assess the effect that Telstra's bundling is having on competition across a range of telecommunications markets.

As a consequence, the ACCC issued a revised RKR to Telstra in March 2006 specifying the reporting format to be used. The revised RKR requires Telstra to provide quarterly reports on its bundled service products, including information on matters such as the number of customers, the revenue and the total discount given for each bundled offering.

5.4 Monitoring and reporting

5.4.1 Corporate competition report

The ministerial direction on accounting separation (see 5.2.2) requires the ACCC to monitor and prepare six-monthly reports on competition in the telecommunications industry in the corporate segment of the business customer group.

The ACCC's first report, covering the July to December 2003 period, was tabled in parliament on 2 December 2004. The second report was tabled in parliament by the minister in October 2005. The third report, covering the period January–December 2005, was tabled in parliament on 5 September 2006.

The first report was a starting point from which to develop the reporting series. The report did not draw any firm conclusions on the state of competition in the corporate segment but delineated the corporate customer segment and outlined the analytical framework the ACCC intended to employ in assessing the effectiveness of competition for future reports.

The second report gives the ACCC's preliminary competition analysis based on information obtained as part of its other reporting functions, including the competitive safeguards report under Part XIB, Division 11 of the TPA.

The ACCC notes in the third report that it currently does not possess detailed and regular information on the supply of services to the corporate customer segment. The ACCC had proposed to implement RKRs to enable a sufficient gathering of data to assess the state of competition in corporate markets. However, the RKRs have now been deferred due to the implementation of the operational separation regime for Telstra. In the absence of RKRs the ACCC circulated a pilot survey to a cross-section of corporations and government agencies to gain a better appreciation of the corporate customer market.

Given the qualitative nature of the circulated pilot survey, the third report focuses on:

- the range of services required by corporate customers
- the extent to which telecommunications service providers are able to meet this demand
- the risks associated with changing service provider
- the different types of tender process by which contracts are awarded.

The ACCC may consider a more comprehensive survey for its next report.

5.4.2 Broadband competition monitoring

Part XIB, Division 11 of the TPA enables the minister to require the ACCC to provide quarterly reports about competition within the telecommunications industry. In May 2003 the minister issued Monitoring and Reporting on Competition in the Telecommunications Industry Determination 2003 (No. 1), requiring the ACCC to provide a quarterly report to the minister on matters relating to competition in broadband services.

As noted in the telecommunications competitive safeguards report for 2004-05, industry raised several concerns regarding the significant costs of compliance with the determination. Therefore in 2005–06 the ACCC, DCITA and other agencies continued to consider the best way to formalise the collection of broadband statistics, with an emphasis on developing an effective monitoring regime that minimises the red-tape burden on telecommunications carriers.

In the meantime, the ACCC has continued to release its quarterly snapshot of broadband deployment, which provides aggregated data on the deployment of broadband services in Australia, disaggregated by technology type. The ACCC will continue to release this report until an expanded monitoring framework is implemented.

6 Access to telecommunications network services

This section outlines how the ACCC regulates access to telecommunications networks, including the declaration of telecommunications services, the arbitration of access disputes and the development of pricing principles for particular services.

Part XIC of the TPA establishes the industry-specific access regime for the telecommunications industry. The primary objective of Part XIC is to promote the long-term interests of end users (LTIE), which is determined by assessing whether an action is likely to achieve the objectives of:

- promoting competition in telecommunications markets
- achieving any-to-any connectivity (that is, ensuring communication between users of different networks)
- encouraging the economically efficient use of, and investment in:
    - infrastructure by which listed services are supplied
    - any other infrastructure by which listed services are, or are likely to become, capable of being supplied.

The Part XIC access regime only applies to services that are declared. Declaration is the process of determining whether a service should be subject to access regulations. Services can only be declared after the ACCC has conducted a public inquiry.

A number of services supplied under pre-existing access agreements were deemed to be declared on commencement of Part XIC on 1 July 1997. The ACCC had previously assessed that declaration of these services was in the LTIE.

Once a service is declared, the access provider is subject to SAOs, which require them to provide the service, on request, to the access seeker. In doing so, the access provider must take all reasonable steps to ensure that the technical and operational quality of the service is equivalent to the service it provides to itself.

While the terms and conditions of access are not specified in the TPA, it does provide three ways in which they can be determined:

- They can be determined by commercial negotiation between the access provider and access seeker.
- If commercial negotiations cannot result in an agreed outcome, the ACCC, following notification of a dispute, can determine the access terms and conditions in an arbitration between the access seeker and provider of the declared service.

- The ACCC can accept an undertaking by the access provider that will determine the terms and conditions of access.

The ACCC encourages industry participants to negotiate and settle their own disputes and will continue to do so.

6.1 Public inquiries into the declaration of telecommunications services

The *Telecommunications services—declaration provisions* guide explains the ACCC's approach to declarations, including the matters that it must consider and how it will consider them. The guide also contains a section dealing with procedural issues, such as the public inquiry process.

6.1.1 Review of fixed network services

In July 2006 the ACCC completed an inquiry to examine the future regulation of certain key fixed network and wholesale services.

The review considered:

- the continued declaration of the ULLS and PSTN O/TA
- the impact of emerging network technologies, such as wireless or fibre networks, on the durability of the bottleneck nature of the existing copper CAN
- whether there was a case for declaration of a wholesale xDSL service.

The ACCC concluded that continued declaration of the ULLS and PSTN O/TA will promote competition in various wholesale and retail markets and will encourage efficiency in infrastructure usage and investment. The ACCC, therefore, decided to extend the declaration of the ULLS and PSTN O/TA on a national basis for a further period of three years. However, the ACCC recognised that competitive conditions can change and may necessitate amendments to regulatory arrangements.

The ACCC therefore sees this review of fixed network services as part of an ongoing evaluation of the need for regulation.

As part of the final determination the ACCC also decided to:

- revoke the declaration of the conditioned local loop service (there has been no material use of this service since it was declared in 1997)
- not declare a wholesale xDSL service at this time as it could encourage greater reliance on resale of xDSL services when greater take-up of the ULLS and LSS could drive lower wholesale xDSL prices and innovation.

6.1.2 Local services review

In 2005–06 the ACCC conducted a review of its regulatory approach to wholesale services that are used to provide local telecommunications. The review considered whether the LCS declaration should be continued, the extent of any declaration and the pricing of the service. The review also considered alternative services which may be used to provide local calls—such as PSTN origination and termination—and reconsider the need to declare a WLR service.

The ACCC released its final decision in July 2006, continuing the declaration of the LCS and formalising the declaration of a WLR service for three years. The three-year period was chosen to allow current uncertainty over the state of competition and infrastructure deployment to be resolved at the time of the next declaration review, and to align the expiry dates with the declarations arising from the ACCC's strategic review of the regulation of fixed network services.

The ACCC decided to continue to exclude CBD areas from the declarations. This was because it considered that there were currently no effective substitutes for the two wholesale services outside of CBD areas and that continuing the declaration would encourage competition and the efficient use of and investment in telecommunications infrastructure.

The ACCC finalised indicative prices for the two services in November 2006.

6.1.3 Mobile international inter-carrier roaming report

The ACCC released its final report of the mobile services review on international inter-carrier roaming in September 2005.

The final report expressed concern that prices for international roaming services appear to be very high, especially when compared to charges set for other mobile services.

As a result, the ACCC outlined its intention to monitor the average prices paid for international roaming services and liaise with ACMA about appropriate measures for improving consumer information in the market.

This was the final report released about mobile services as a result of the comprehensive mobile services review commenced by the ACCC in 2003.

6.1.4 Review of the analog pay television service declaration

In accordance with s. 152ALA(7) of the TPA, the ACCC initiated a review into the declaration of the analog subscription television broadcast carriage service (analog payTV service) in November 2006.

The analog payTV service was declared on 1 September 1999. The service allows carriage service providers to compete in the delivery of analog signals for transmitting a subscription television service, as well as the use or potential use of conditional access services. The declaration is due to expire in July 2007. Undertakings given by Foxtel and Telstra pursuant to that declaration expire in March 2007.

As part of its review process, the ACCC released a discussion paper in November 2006 seeking submissions from interested parties on whether to extend, vary or revoke the declaration. Subject to the views from interested parties, the discussion paper put forward the preliminary view that the declaration of the analog payTV service is unlikely to promote the LTIE and therefore should not be continued.

6.2 Exemption from declaration

The SAOs require, among other things, that an access provider supply a declared service to an access seeker if requested. Under s. 152AT of the TPA, a carrier or CSP may apply to the ACCC for a written order exempting it from the SAOs that apply to a declared service.

If the ACCC believes that if an order made on an application for an exemption is likely to materially affect the interests of a person, the ACCC must publish the application and invite submissions on whether the application should be accepted.

The TPA also enables an access provider (or a potential access provider) to apply for and receive an exemption from the SAOs before an investment in a service is made or that service becomes an active declared service.

The ACCC must not grant an exemption order unless it is satisfied that the making of the order will promote the LTIE.

The ACCC did not receive any applications for exemptions in 2005–06.

6.3 Access undertakings

Part XIC includes a mechanism allowing access providers to give voluntary access undertakings on the supply of declared services. Undertakings must set out the terms and conditions under which the access provider undertakes to comply with the particular SAOs.

Under Part XIC the ACCC is required to accept or reject an undertaking. If accepted, the ACCC must apply a relevant undertaking in an access dispute, providing some certainty to both access providers and access seekers.

In assessing access undertakings, the ACCC must be satisfied that:

- the undertaking is consistent with the SAOs outlined in the TPA
- the terms and conditions of access are reasonable, as defined in the TPA.

6.3.1 Telstra PSTN and LCS undertaking

On 22 March 2006 Telstra lodged an ordinary access undertaking specifying price-related terms and conditions upon which it undertakes to meet its applicable SAOs to supply the PSTN O/TA services and the LCS. The lodging of the 2006 undertaking followed a series of decisions by the ACCC on PSTN and LCS charges since 2003.

The Telstra undertaking proposed charges for third party access to the PSTN O/TA and the LCS for 2006–07 and 2007–08. Telstra proposed headline charges of 9.28 cpm for the LCS, and a headline rate of 2.18 cpm end and 2.28 cpm end for PSTN O/TA for 2006–07 and 2007–08 respectively. These charges were derived from the PIE II model submitted by Telstra in support of its undertaking.

The ACCC issued its final decision to reject the undertaking on 29 November 2006. The ACCC did not consider that the price terms and conditions were reasonable when assessed against the relevant statutory criteria in s.152AH of the TPA.

6.3.2 Telstra ULLS and LSS monthly charge and connection undertakings

The ACCC completed its assessment of Telstra's December 2004 ULLS and LSS monthly charge and connection/disconnection charge undertakings during 2005–06. The ACCC made the final decision in December 2005 to reject the ULLS and LSS monthly charge undertakings on the grounds that it could not be satisfied that the terms and conditions in the undertakings were reasonable. The ACCC considered that:

- Telstra's claimed network costs were excessive
- Telstra sought to recover ULLS- and LSS-specific costs over too narrow a range of services
- Telstra's claims for access deficit contribution and inter-exchange network bypass cost components were not reasonable.

In January 2006, Telstra applied to the tribunal, seeking to have the ACCC's decision to reject the LSS monthly charge undertaking reversed. The tribunal rejected the application in June 2006, affirming the ACCC's December 2005 final decision.

The ACCC also released a draft decision in December 2005 to reject the ULLS and LSS connection/disconnection undertakings on the grounds that it could not be satisfied that the terms and conditions were reasonable. Telstra subsequently withdrew the ULLS connection charge undertaking in December 2005. The ACCC released a final decision to reject the LSS connection/disconnection charge undertaking in April 2006. The ACCC considered that Telstra's proposed charges were excessive and also that there would be limited circumstances where a separate disconnection charge would be warranted.

6.3.3 Telstra ULLS averaged monthly charge undertaking

Following the ACCC's final decision in December 2005 to reject Telstra's ULLS monthly charge undertaking, Telstra immediately submitted new ULLS monthly charge undertakings that proposed a single, geographically averaged ULLS monthly charge to apply across all of Australia. This was a departure from previous Telstra ULLS pricing practice and undertakings, which had used a banded pricing structure that reflected the different costs of service provision in different geographic regions.

The ACCC released its final decision to reject the undertakings August 2006 on the basis that it could not be satisfied that the terms and conditions in the undertakings were reasonable. The ACCC considered that it could not be satisfied that Telstra's claimed network costs were appropriate, as there were problems with the transparency of Telstra's PIE II model and concerns with a number of assumptions in the model. In particular, the ACCC was concerned that Telstra had again sought to recover ULLS specific costs over too narrow a range of services and that it could not be satisfied Telstra's claimed return on capital was appropriate. These conclusions mirrored conclusions in previous ACCC assessments of Telstra's ULLS pricing. The ACCC could also not be satisfied that Telstra's network modernisation provisions were reasonable because they appeared to unduly negatively affect the interests of access seekers.

In relation to Telstra's new proposal to charge a single geographically averaged price across the country, the ACCC concluded that it could not be satisfied that Telstra's proposed geographic averaging was reasonable. The ACCC considered that the proposed averaged price would adversely affect competition for basic telephony and broadband services and distort usage and investment decisions, thereby encouraging inefficiency.

Following the ACCC's final decision to reject the averaged ULLS monthly charge undertakings, Telstra applied to the tribunal in September 2006, seeking to have the ACCC's decision reversed. The tribunal heard the application in December 2006 and a decision is expected in the first half of 2007.

6.3.4 Optus MTAS undertaking

Optus Mobile Pty Limited and Optus Networks Pty Limited (together 'Optus') lodged an undertaking for the supply of its domestic GSM terminating access service (DGTAS) with the ACCC on 23 December 2004. The DGTAS relates to a 'subset' of the declared MTAS because it only covers services on Optus's GSM network.

The Optus undertaking proposed a 'target' price for the DGTAS of 17 cpm for the calendar year 2007. The target price was constructed using a mark-up on Optus's forward-looking long-run incremental cost for the supply of the DGTAS for 'fixed and common costs' based on Ramsey-Boiteux pricing principles and another for an 'network externality surcharge'. A gradual adjustment to the target price was intended to occur over a three-year period from 2005 to 2007, in which the price for the MTAS would fall from 19.25 cpm to 17.00 cpm.

On 3 February 2006 the ACCC released its final decision to reject the Optus undertaking on the basis that the price and non-price terms and conditions were not reasonable.

Optus applied to the tribunal for review of the ACCC's decision on 23 February 2006.
On 2 November 2006 the tribunal held that it was not satisfied that it was appropriate for Optus to adopt a Ramsey-Boiteux pricing approach to determine the allocation of 'fixed and common costs'. The tribunal further held that it did not have confidence in the particular methodology adopted by Optus to recover a 'network externality surcharge'. On these grounds, the tribunal concluded that it was not satisfied that Optus's price term of 17 cpm for the DGTAS for 2007 was reasonable in relation to the matters set out in s. 152AH and the objectives in s. 152AB of the TPA. Similarly the tribunal was not satisfied that Optus's prices for the DGTAS for 2005 and 2006 were reasonable.

6.3.5 Vodafone MTAS undertaking

Vodafone initially lodged an ordinary access undertaking for the supply of its MTAS on its GSM network on 26 November 2004. However, this was subsequently withdrawn and Vodafone resubmitted a new undertaking on 23 March 2005. The undertaking proposed an adjustment path from a price of 19.38 cpm in 2005 to a target price for the MTAS of 16.15 cpm for 2007, with a proposed 'FTM pass-through safeguard'. The FTM pass-through safeguard required access seekers (where relevant) to reduce the average retail price for FTM calls terminating on Vodafone's GSM network or compensate Vodafone with a 'pass through rebate'.

On 31 March 2006 the ACCC issued a final decision to reject the Vodafone undertaking on the basis that the price terms and conditions were not reasonable when assessed against the relevant statutory criteria in s. 152AH of the TPA.

On 21 April 2006, Vodafone applied to the tribunal for review of the ACCC's decision. The tribunal published its decision in January 2007. The tribunal held that, due to the empirical flaws in the financial models used by Vodafone to determine the costs of providing the MTAS, it was not satisfied that the target price of 16.15 cpm for the MTAS was reasonable. The tribunal stated that its analysis indicated that that the cost of providing the MTAS was at least 4 cpm below Vodafone's target price of 16.15 cpm. The tribunal therefore held that it was not satisfied that Vodafone's price term of 16.15 cpm for the period 1 January 2007 to 30 June 2007, and for any subsequent validity periods, was reasonable in relation to the statutory criteria set out in s. 152AH and the objectives in s. 152AB of the TPA. The tribunal was also not satisfied that the provisions of the pass-through safeguard were reasonable when assessed against the matters in s. 152AH and the objectives in s. 152AB of the TPA.

6.3.6 Hutchison MTAS undertakings

On 7 October 2005, Hutchison lodged six ordinary access undertakings with the ACCC regarding the provision of the MTAS on both Hutchison's 2G and 3G networks.

Hutchison proposed differential pricing for the supply of the MTAS based on the call origination:

- The single rate undertakings for Hutchison's proposed price of 12 cpm for MTM calls of 12 cpm if certain reciprocal arrangements and transit traffic conditions were met for the period to 31 December 2007.

- The dual-rate undertakings proposed a dual rate for the supply of the MTAS a price of 12 cpm for MTM calls (if the rate was provided reciprocally and certain transit traffic conditions were met) and an alternative or 'fall-back' rate of 21 cpm, if either of the conditions for a 12 cpm price were not met for the period to 31 December 2007.
- Another set of undertakings (non PMTS undertakings) proposed a price of 18 cpm for the supply of MTAS for FTM calls and calls originating from international networks for the period to 30 June 2006.

Hutchison requested that the ACCC consider accepting the undertakings in combination or individually.

On 23 June 2006, the ACCC released its final decision to reject the Hutchison undertakings on the basis that the price terms and conditions for the dual rate and non-PMTS undertakings were not reasonable and that the non-price terms and conditions for all the undertakings were not reasonable.

6.3.7 Special access undertaking in relation to Foxtel's digital set-top unit service

Foxtel lodged a special access undertaking under s. 152CBA in Part XIC, Division 5 of the TPA with the ACCC on 6 October 2005. The undertaking specifies the terms and conditions upon which Foxtel undertakes to supply what it terms as the digital set-top unit service.

A digital set-top unit is a device located at a customer's premises that is used for the reception and decryption of digital subscription TV signals.

Under s. 152CBA of the TPA a special access undertaking can be lodged by a person who is, or expects to be, a carrier or a carriage service provider, so long as the service is not an active declared service. This is the first time that the ACCC has assessed a special access undertaking under Part XIC of the TPA.

Following public consultation, the ACCC issued its draft decision to reject Foxtel's undertaking on 1 September 2006. While the ACCC considered the terms and conditions in the undertaking to be reasonable, it could not be satisfied that the terms and conditions were consistent with the SAOs.

Foxtel withdrew its undertaking on 1 December 2006 and simultaneously submitted a revised special access undertaking which was designed to meet the ACCC's concerns expressed in its draft decision on the original undertaking.

The lodgment of the new special access undertaking requires a new assessment process. In December 2006, the ACCC issued a public discussion paper seeking the views on interested parties on the revised special access undertaking.

6.3.8 Optus request to vary its payTV undertakings

The ACCC received a request from Optus to vary its s. 87B undertakings—originally given in 2002 in relation to the content sharing arrangement between Optus and Foxtel—to provide a minimum level of non-Foxtel content over its subscription television service. The ACCC considered but did not accept this request.

6.3.9 New digital television services

The government announced that in 2007 ACMA will allocate two licences for currently unassigned broadcasting spectrum (the channel A and channel B licences). Each channel is capable of supporting multiple digital television services. The channel A licence may be used to provide television services to fixed in-home receivers, while the channel B licence may be used for a wider range of services, including fixed in-home services or mobile television.

The ACCC has a role in the initial allocation of these two licences and subsequent monitoring and enforcement of competition-related legal obligations on licence-holders.

The *Radiocommunications Act 1992* (the Radiocommunications Act) has been amended to require bidders for the channel B licence to first have an access undertaking accepted by the ACCC. The Radiocommunications Act allows the ACCC to make a legislative instrument setting out decision-making criteria to be applied in deciding whether to accept an undertaking. The ACCC can also make a legislative instrument establishing procedural rules. The ACCC issued a discussion paper on 15 December 2006 seeking the views of interested parties on how these requirements might be implemented.

Bidders for either licence may also need to seek clearance from the ACCC in relation to s. 50 of the TPA.

6.3.10 Fibre-to-the-node and fibre-to-the-premise proposals

In 2006 the ACCC was approached to discuss access arrangements for possible investments in FTTN or fibre-to-the-home (FTTH) infrastructure.

The ACCC was approached to discuss those proposals because, under the TPA, firms can seek regulatory certainty about the terms of access to their networks. The ACCC has made it clear that no ruling on a proposed set of regulatory arrangements would be made without full public scrutiny of the proposed arrangements. However, the ACCC will hold discussions with firms to assist them to formulate a comprehensive proposal that could be submitted for public consultation.

Telstra approached the ACCC in March 2006 about a possible FTTN upgrade to its network in five cities. The ACCC and Telstra held discussions from March until late July 2006, at which point the ACCC called on Telstra to finalise its FTTN proposal, including adding a transition plan for existing competitors using the copper network, and put it out for public discussion. This was in recognition of the fact that ongoing discussion of Telstra's FTTN proposal had created considerable uncertainty for competitors that had already made or planned significant investments based on the ULLS. Telstra unilaterally decided to discontinue the talks on 7 August 2006.

A further consortium of carriers known as the G9 approached the ACCC in 2006 to discuss a possible FTTN upgrade. A central feature of this model is the separation of the network ownership and the management from downstream retail service provision with open network access on equivalent terms to all access seekers, regardless of their ownership interests in the network. The ACCC and G9 members held preliminary discussions in 2006 with the G9 members signalling their desire to hold more detailed discussions in 2007.

Several state and territory governments also advised the ACCC of their city-based FTTH, FTTN and other broadband rollout plans.

6.4 Access disputes

As part of the ACCC's role in regulating access in the telecommunications industry, it has arbitration powers under Part XIC of the TPA enabling it to issue directions, conduct hearings and make determinations to resolve access disputes. Under Part XIC of the TPA the ACCC must undertake arbitrations if notified of an access dispute, but only after private negotiations, mediation and/or conciliation fail. When the ACCC accepts a relevant access undertaking, the terms of the undertaking must be applied in resolving the dispute. If there is no undertaking relevant to the dispute, then the ACCC may determine the appropriate terms and conditions within the arbitration process.

Before a dispute is referred to the ACCC for arbitration:

- A declared service must be supplied by a carrier or a CSP.
- One or more SAOs must apply to the carrier or the CSP in relation to the declared service.
- An access seeker must be unable to agree with the carrier or the CSP about the terms and conditions of the obligations or any aspect of the declared service that the carrier or the CSP is to comply with.

Twenty-eight new telecommunications access disputes were brought before the ACCC in 2006 for arbitration under Part XIC of the TPA. This is the highest number of disputes notified in a single year, compared to a low of zero disputes notified in 2002 and 2003. By the end of 2006, 92 access disputes had been notified to the ACCC since the legislation was introduced in 1997. Telstra has been a participant in 74 of the disputes, mainly as an access provider, while Optus has been in 31.

6.4.1 Arbitrations for fixed network services

The ACCC received 14 new arbitrations in 2005–06 for fixed network services. These arbitrations related to the ULLS (6), LSS (3), the domestic transmission capacity service (1) and the PSTN O/TA (4). These arbitrations added to the two access disputes notified by Primus in 2004–05 on the ULLS and the LSS.

The following is a list of the 2005–06 fixed network services access disputes:

- Optus Networks notified an access dispute with Telstra on 18 November 2005, relating to annual charges, connection charges and other charges for the ULLS.
- Chime notified three access disputes with Telstra on 3 February 2006, relating to annual and connection charges for the ULLS, annual and connection charges for the LSS and annual and connection charges for the domestic transmission capacity service.
- XYZed notified an access dispute with Telstra on 9 February 2006, relating to annual and connection charges for the ULLS.
- Amcom notified an access dispute with Telstra on 17 February 2006, relating to connection charges for the LSS.
- Primus notified an access dispute with Telstra on 6 March 2006, relating to annual charges for the ULLS.
- Optus Networks notified two access disputes with Telstra on 9 June 2006, relating to origination and termination rates for the PSTN O/TA.
- Optus Mobile notified two access disputes with Telstra on 9 June 2006, relating to origination and termination rates for the PSTN O/TA.
- PowerTel and Request Broadband notified two access disputes with Telstra on 23 May 2006, relating to annual and connection charges for the ULLS.
- Request Broadband notified an access dispute with Telstra on 23 May 2006, relating to annual charges for the LSS.

All access disputes, including those involving Primus in 2004–05, were continuing at the end of 2005–06. In the post-reporting period (November 2006), Amcom advised the ACCC that it was withdrawing its LSS connection charges dispute.

The ACCC published an interim determination in relation to the ULLS annual charge arbitration between Chime and Telstra on 1 September 2006. This interim determination was extended to the ULLS disputes between each of Primus, Optus Networks, XYZed, Request Broadband PowerTel were in engaged in with Telstra.

Interim determinations were also provided by the ACCC in December 2006 for access disputes between Telstra and both Chime and Request Broadband regarding Telstra's annual charges for the supply of LSS. Reasons supporting the interim determinations were published by the ACCC on 18 January 2007.

6.4.2 Arbitrations for mobile services

The ACCC received 14 new access disputes in 2005–06 concerning the MTAS. These were:

- Telstra notified an access dispute with Optus on 7 December 2005.
- Telstra notified an access dispute with Hutchison Telecommunications on 19 December 2005.
- Telstra notified an access dispute with Hutchison 3G on 19 December 2005.
- Vodafone notified an access dispute with Hutchison Telecommunications on 20 December 2005.
- Vodafone notified an access dispute with Hutchison 3G on 20 December 2005.
- AAPT notified an access dispute with Vodafone on 11 January 2006.
- Optus notified an access dispute with Telstra on 12 January 2006.
- Telstra notified an access dispute with Vodafone on 7 February 2006.
- Hutchison Telecommunications notified an access dispute with Telstra on 8 February 2006.
- Hutchison 3G notified an access dispute with Telstra on 8 February 2006.
- Optus notified an access dispute with Hutchison Telecommunications on 2 May 2006.
- Optus notified an access dispute with Hutchison 3G on 2 May 2006.
- AAPT notified an access dispute with Hutchison Telecommunications on 14 June 2006.
- AAPT notified an access dispute with Hutchison 3G on 14 June 2006.

The ACCC provided interim determinations in seven of these access disputes, while interim determinations were provided in a further nine disputes that were notified to the ACCC in 2004–05.

No final determinations were made in any MTAS disputes in 2005–06.

Vodafone withdrew its disputes with both Hutchison Telecommunications and Hutchison 3G.

6.5 Pricing principles and indicative pricing

Following the declaration of a service, it has often been ACCC practice to develop and release pricing principles to inform the market of its likely decisions in arbitrations, providing greater certainty to access seekers and promoting the timely resolution of access disputes without having to refer them to the ACCC.

Changes to the legislation in December 2002 required that pricing principles be issued for each newly declared service.

6.5.1 Pricing principles and indicative prices for PSTN, LCS and WLR services

The ACCC is required by s. 152AQA of the TPA to determine principles relating to the price of access to declared services.

The ACCC has recently held two public inquiries into fixed-line declarations. The review of local services considered the declaration of LCS and WLR. The review of fixed services considered, amongst other services, the declaration of PSTN O/TA.

On 28 July 2006 the ACCC released its final report for both inquiries. In *Local services review—final decision*, the ACCC decided to declare the LCS and WLR and published its draft determination on pricing principles and indicative prices for both services. In *Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination*, the ACCC decided to declare the ULLS and PSTN O/TA and published its draft determination on pricing principles and indicative prices for PSTN O/TA. The ACCC invited submissions on the draft pricing principles and indicative prices set out in both decisions by 31 August 2006.

In response to the *Local services review—final decision* and the *Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination*, the ACCC received submissions from Telstra, Optus and the Competitive Carriers Coalition (who also submitted a report prepared on its behalf by Frontier Economics). Following an assessment of these submissions the ACCC made its final determination on pricing principles and indicative prices applicable to LCS, WLR and PSTN O/TA on 29 November 2006.

The ACCC is currently in the process of considering the development of a new cost model for fixed lined services, hence has only produced indicative prices to apply during 2006 and 2007. In the absence of a cost model, the ACCC may have regard to these prices throughout 2007. Furthermore the ACCC has not published indicative prices for the ULLS, as there are a number of pricing issues currently being resolved in arbitrations for the ULLS. The ACCC does not consider it appropriate to pre-empt the assessment at this time.

6.5.2 Pricing principles for the MTAS

The MTAS pricing principles determination for the period 1 July 2004 to 30 June 2007 will expire on 30 June 2007.

Given that the MTAS is a declared service until 30 June 2009, to support any future pricing principles determination for the MTAS, the ACCC commenced a public tender process for the development of a bottom-up cost model which will inform it about the efficient cost of supply of the MTAS in an Australian context using a TSLRIC+ conceptual framework.

The ACCC's decision to develop a bottom-up cost model builds on the international cost benchmarking analysis and the analysis of information provided through the regulatory reporting framework that informs the MTAS pricing principles determination for the period 1 July 2004 to 30 June 2007. The conservative upper bound estimate of supplying the MTAS of 12 cpm pricing will prevail from 1 January 2007. In the June 2004 final decision of the mobile terminating access service, on whether or not the commission should extend, vary or revoke its existing declaration of the mobile terminating access service, the ACCC stated that any reduction in pricing below 12 cpm could be supported by the development of its own bottom-up cost model, given the ACCC has:

- not developed a specific model to estimate TSLRIC+ in Australia at this time
- concerns regarding the possible harm that might be caused by disrupting the business plans of MNOs if the ACCC were to immediately reduce the price of the MTAS to TSLRIC+.

The ACCC believes a pricing principle that generates a gradual reduction in the price of the MTAS so that it reduces to a level that represents a closer association of price and the best measures the ACCC has available to it of the TSLRIC+ of providing the service within Australia would be most appropriate under the TPA at this time. The principles by which this price path should be determined are as outlined above.

Over the longer term, however, the ACCC wishes to stress that before it would reduce the price of the MTAS below the upper end of the range of best estimates available to it of the TSLRIC+ of providing the MTAS, the ACCC would develop a more detailed estimate of the TSLRIC+ of providing the MTAS in Australia. This could be via developing a model to specifically model the TSLRIC+ of providing the MTAS in Australia, or via a detailed international benchmarking exercise that sought to make adjustments for all factors that drive the TSLRIC of providing the MTAS in different countries for Australia-specific factors.[89]

The request for tender for the development of the bottom-up TSLRIC+ model was released on 31 March 2006 and after an extensive evaluation process, the ACCC engaged WIK Consult GmbH in June 2006 to develop a bottom-up cost model.

6.6 Procedural rules

Under amendments to the TPA which came into force in September 2005, the ACCC was given broad powers to make written rules to deal comprehensively with the procedures to apply to the ACCC and third parties during processes under Part XIC of the TPA.

Procedural matters that the rules could deal with include confidentiality of information, the form and content of documents, minor amendments to undertakings, the provision of information by interested parties and the need for oral hearings in access disputes.

89 ACCC, *Mobile Services Review Mobile Terminating Access Services Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service*, June 2004, p. 211.

The legislation required that the ACCC publish a development plan setting out its intended approach to making the procedural rules. The ACCC published a position paper in February 2006 and finalised the development plan in March 2006. The development of the rules is ongoing. The ACCC is aiming to release draft procedural rules for public consultation in early 2007.

6.7 Telecommunications access code

Under s. 152BJ of the TPA, the ACCC is empowered to make a telecommunications access code. In 2005–06 the ACCC did not consider that a code was required.

7. Activities under the Telecommunications Act

7.1 Operational separation of Telstra

Legislation passed by parliament in September 2005—and subsequent ministerial determinations made under the Telecommunications Act—had provisions requiring the operational separation of Telstra.

The operational separation framework seeks to support (amongst other things) greater equivalence and transparency in Telstra's supply of certain designated wholesale services, to provide ongoing assurance that Telstra is not favouring its retail business units by implicitly supplying services to itself at prices which are unjustifiably lower or of a higher quality than those offered to downstream competitors.

The Telecommunications Act requires Telstra to prepare and give to the minister for approval a draft operational separation plan (OSP) which must be directed towards the achievement of the aim and objectives of operational separation. As such, the implementation of the operational separation of Telstra is primarily the minister's responsibility—the ACCC's role is essentially to monitor and report on the OSP that has been approved by the minister. Telstra submitted its draft OSP to the minister on 3 April 2006, which the minister approved on 23 June 2006.

'Equivalent' pricing is to be addressed through a price equivalence framework (PEF) that is specified in the OSP.

In August 2006, the ACCC released an information paper entitled *Operational separation—retail pricing protocol*. The purpose of this protocol is to outline the ACCC's role in relation to pricing aspects of the operational separation of Telstra, and how this role sits alongside its responsibilities under the TPA.

This protocol also provides guidance to Telstra as to how it should demonstrate pricing equivalence for particular designated services. As indicated in Telstra's OSP, the intention is for the ACCC to provide its views on methodological issues for Telstra's consideration in the development of its retail pricing tool.

Telstra's retail pricing tool is a set of imputation tests that seek to assess the impact that Telstra's price changes would likely have on the margin available to an efficient competitor. The retail pricing tool is expected to be applied by Telstra in accordance with the terms of the price equivalence framework strategy to test material price changes proposed by Telstra for designated services before those price changes are generally released to the market.

7.2 Number portability

Number portability provides end users with the ability to change their service provider within specified number ranges (for example, the number range used to provide mobile services) and retain the same number.

Part 22, Division 2 of the Telecommunications Act requires ACMA to develop a numbering plan outlining the allocation and use of numbers in connection with the supply of carriage services.

Under the Telecommunications Act, the ACCC has statutory powers to direct the ACMA on number portability. ACMA cannot insert rules about number portability in the Telecommunications Numbering Plan 1997 unless directed to do so by the ACCC, and any rules the ACMA includes in the numbering plan on number portability must be consistent with any directions by the ACCC.

The numbering plan is the plan for the numbering of carriage services in Australia and the allocation and use of numbers in connection with the supply of such services.

During 2005–06, the ACCC did not issue any directions to ACMA on number portability.

The government's recommendations on the implementation of VoIP services in Australia include requiring the ACCC to consider extending requirements for pre-selection and portability to VoIP services. The ACCC has advised the numbering advisory council that such consideration will occur once demand for VoIP services has progressed to the point where it is feasible to make an assessment of whether or not preselection and portability of such services would be in the LTIE.

7.3 Communications Alliance

During 2005–06 ACCC staff participated as observers on several codes committees organised by Communications Alliance, the industry body for telecommunications companies. Communications Alliance was formed in 2006 following the merger of the Australian Communications Industry Forum (ACIF) and the Service Providers Association Inc (SPAN).

Communications Alliance committees comprise representatives of the telecommunications industry, consumer groups and government regulators (such as the ACCC, ACMA and the Telecommunications Industry Ombudsman).

Progress was made on several codes within Communications Alliance during 2005–06, covering VoIP and local number portability (revision).

The ACCC's involvement in Communications Alliance committees includes consumer protection issues, as well as operational and network issues.

Communications Alliance's Code Administration and Compliance Scheme will continue to monitor compliance of industry participants who are signatories to these codes. If codes are registered with ACMA, it can take enforcement action against industry participants for failure to comply.

7.3.1 Voice over Internet Protocol

During 2005–06, ACCC staff participated in a working group convened by Communications Alliance to identify and progress issues relating to VoIP.

The VoIP working group identified five primary topics that are being considered:

- quality of service—including related issues of interconnection, traffic engineering, packet market and handling
- VoIP service description—what comprises a voice service, can VoIP services be graded
- location information—potential issues concerning nomadicity, customer equipment functionality, reliability, technical feasibility
- numbering—potential issues concerning the geographic number range, rights of use, number portability, preselection, emergency services, legal interception, caller line identification
- fault handling/restoration and customer support.

7.3.2 Local number portability

During 2005–06, ACCC staff participated in a review of the local number portability (LNP) code. LNP allows customers to retain their telephone number when changing or porting between service providers.

The code was revised to remove the need to retarget complex notification advices in category C ports. The category C porting process requires project management and is the default process used to port numbers associated with complex telephone services.

7.3.3 Next generation networks and VoIP

The ACCC is represented at two Communications Alliance working groups. One is looking at interconnection of VoIP services with particular emphasis on maintaining service quality of voice calls made across multiple networks, and the other is working on general quality of service standards for next generation networks.

The ACCC will monitor and report on competition issues associated with VoIP services as part of its normal reporting requirements.

7.4 Other codes

During 2005–06, Communications Alliance developed and revised a number of industry codes covering consumer, operational and network issues in the telecommunications industry. The ACCC contributes to the development of codes through its participation as an observer on working committees and membership of reference panels.

The consumer interests reference panel provides advice on a range of consumer issues including:

- customer information on prices, terms and conditions
- complaint handling
- billing
- selling practices

The Communications Alliance code administration and compliance scheme monitor compliance of industry participants who are signatories to industry codes. If codes are registered with ACMA, the Communications Alliance can take enforcement action against industry participants for failure to comply. The Telecommunications Industry Ombudsman is an industry scheme that considers consumer complaints in relation to industry codes registered with ACMA.

A number of revised codes were registered with ACMA in 2005–06. These covered a range of issues including:

- credit management
- preselection
- mobile number portability
- commercial churn
- local number portability.

The Credit Management Code was revised to address problems arising with consumers experiencing high bills and difficulties in paying for telecommunications services. The revised code requires suppliers to credit assess customers if their service expenditure or usage is not limited and to provide customers with credit control tools for the management of customer expenditure. The revised code requires the development of a policy for customers experiencing financial hardship. The code was registered by ACMA in April 2006 with a delayed implementation period of six months for some clauses.

Progress was made on several codes within the Communications Alliance during 2005–06, covering:

- customer transfer (revision)
- handling of life threatening and unwanted calls (revision)
- priority assistance for consumers with life threatening medical conditions (revision).

Progress was also made on the introduction of a Do Not Call Register and national telemarketing standard under the *Do Not Call Register Act 2006*. The register allows individuals and businesses to register their private phone numbers to opt out of receiving unsolicited telemarketing calls. The national telemarketing standard will set out the minimum required information and behaviours when making an unsolicited voice call to an Australian telephone number (both fixed-line and mobile). Both the register and the standard will commence operation in 2007

7.4.1 Other codes and industry schemes

Significant progress was made on the development of a scheme to regulate mobile phone premium services. The industry self regulatory scheme developed by mobile service providers and content service providers will provide mobile phone customers with clear and transparent information about the costs and terms and conditions on which mobile premium services are offered, and about the handling of complaints about mobile premium services. The scheme covers services sending an SMS to a number starting with 191, 193, 194, 195, 196, 197 or 199 or accessing a mobile carrier 'portal', and is regulated under rules devised by ACMA and set out in the Telecommunications Service Provider (Mobile Premium Services) Determination 2005 (No.1). The scheme was introduced in late 2006.

7.5 Access disputes under the Telecommunications Act

In addition to its role as an arbitrator of access disputes under Part XIC of the TPA, the ACCC also arbitrates disputes under the Telecommunications Act. Disputes covered by the Telecommunications Act relate to matters such as:

- access to telecommunications transmission towers and underground facilities
- access to supplementary facilities (such as exchanges)
- the provision of pre-selection and number portability.

The ACCC announced in September 2006 that it had been notified of an access dispute under clause 36 of Schedule 1 of the Telecommunications Act and r. 3 of the Telecommunications (Arbitration) Regulations. The dispute related to the price paid by Optus for access to telecommunications towers owned or operated by Telstra and the sites of such towers, accessed by Optus under clauses 33 and 34 of Schedule 1 of the Telecommunications Act.

8. Glossary of terms

ACMA	Australian Communications and Media Authority
ADSL	asymmetric digital subscriber line
ARPU	average revenue per user
BT	British Telecom
CAN	customer access network
CDMA	code division multiple access
cpm	cents per minute
CSG	customer service guarantee
CSP	customer service provider
DCITA	Department of Communications, Information Technology and the Arts
DSL	digital subscriber line
DSLAM	digital subscriber line access multiplexers
EBITDA	earnings before interest tax depreciation and amortisation
FTM	fixed-to-mobile
FTTH	fibre-to-the-home
FTTN	fibre-to-the-node
GSM	global system for mobile communications
HFC	hybrid fibre coaxial
HiBIS	Higher Bandwidth Incentive Scheme
HSDPA	high speed downlink packet access
ISP	internet service provider
ISDN	integrated services digital network
Kbps	kilobits per second
LCS	local call service

LSS	line-sharing service
LTIE	long-term interests of end users
Mbps	megabits per second
MMS	multimedia message service
MTAS	mobile termination access service
MTM	mobile-to-mobile
MVNO	mobile virtual network operator
PABX	private automatic branch exchange
PDA	personal digital assistant
PSTN	public switch telephone network
PSTN O/TA	public switch telephone network origination/termination access
RKR	record-keeping rules
SAO	standard access obligations
SMS	short message service
TPA	Trade Practices Act
ULLS	unconditioned local loop service
VoIP	voice over internet protocol
WLR	wholesale line rental

Changes in prices paid for telecommunications services in Australia, 2005–06

Report to the Minister for Communications, Information Technology and the Arts

May 2007

Contents

Key results

Overall average real prices for telecommunications services fell by 6.5 per cent

Second year in a row of significant reduction, after several years of fairly stable pricing.

Average real prices paid for fixed-line services fell by 6.6 per cent

A favourable outcome, relative to the previous year's decline of 1.2 per cent.

Average line rental prices fell by 2.4 per cent, after six years of increases.

Average prices for fixed-to-mobile calls dropped by 10.5 per cent with greater reductions in the past two years, likely reflecting the falling cost of inputs such as mobile terminating charges.

Average real prices for mobile services fell by 6.5 per cent

Reflecting the impact of popular capped plans, with bigger price reductions for post-paid and high-use consumers.

1 Summary

The overall average price paid by consumers for telecommunications services fell in real terms by 6.5 per cent in the 2005–06 financial year.

The overall decrease was the result of a drop of 6.6 per cent in prices paid for fixed-line services and a fall of 6.5 per cent in prices paid for mobile services.

The decline in average prices could have been influenced by several factors, including productivity gains in the telecommunications sector and greater price competition faced by providers of fixed-line services.

The fall in prices paid for fixed-line services was not reflected evenly across the residential and business segments. Average prices paid by residential and business customers fell by 5.5 per cent and 8.6 per cent respectively. As in previous years, price falls for businesses continued to exceed price falls for residential consumers in 2005–06.

Across the individual fixed-line services, price falls in 2005–06 for fixed-to-mobile and local calls have been the largest, with prices falling by 10.5 per cent and 9.5 per cent respectively. The retail price decline for fixed-to-mobile services could have been affected by the declining cost of inputs—in particular, mobile terminating charges—as a result of the ACCC's recent decisions on charges for the mobile terminating access service. Price changes for local calls in 2005–06 could have reflected carriers' treatment of discounts to customers purchasing bundles of telecommunication services, or treatment of per-call revenues from customers subscribing to fixed-line 'capped calling plans'.

In mobile services retail markets, average prices paid by consumers fell by 6.5 per cent in 2005–06.

Prices for GSM services decreased by 6.7 per cent and for CDMA services by 3.3 per cent.

Prices for post-paid GSM services and post-paid CDMA services dropped by 10.2 per cent and 3.6 per cent respectively. It appears that carriers have, since 2004–05, renewed their competition for post-paid (contract) subscribers after focusing in recent years on prepaid mobile consumers. The continued take-up of 'capped' plans and subsidies for handsets caused larger price falls in 2005–06 for consumers of post-paid services with very high usage. Prices for prepaid mobile services fell more slowly in 2005–06 than for post-paid services.

Price changes in the report are calculated using 'real' prices. This is done by adjusting nominal prices for the effects of inflation using the Australian Bureau of Statistics consumer price index.

Table 1.1 Percentage changes in the PSTN services indexes by service and consumer group, 2005–06 and since 1997–98

	Residential		Business		Overall	
	2005–06	since 1997–98	2005–06	since 1997–98	**2005–06**	since 1997–98
basic access	–1.5	95.4	–4.2	41.9	**–2.4**	75.2
local calls	–9.0	–49.3	–10.4	–49.1	**–9.5**	–49.3
national long-distance	–5.6	–31.2	–9.6	–50.7	**–6.9**	–38.8
international	–8.4	–65.9	–10.4	–76.0	**–8.8**	–68.5
fixed-to-mobile	–9.3	–22.7	–12.0	–45.5	**–10.5**	–35.0
overall	**–5.5**	–16.5	**–8.6**	–36.0	**–6.6**	–24.2

Table 1.2 Percentage change in the mobile services index by user group, 2005–06

	Very low	Low	Average	High	Very high	All
GSM						**–6.7**
post-paid	–4.9	–8.3	–0.6	–2.8	–18.7	**–10.2**
prepaid	–1.3	–0.1	1.5	1.9	–5.8	**–0.8**
CDMA						**–3.3**
post–paid	–11.7	–4.1	–0.4	8.8	–11.8	**–3.6**
prepaid	1.6	–3.1	–2.8	–4.2	–2.4	**–2.2**
overall						**–6.5**

2 Purpose and structure of the report

2.1 Purpose of the report

Division 12 of Part XIB of the *Trade Practices Act 1974* requires that the ACCC report each year to the Minister for Communications, Information Technology and the Arts on prices paid by Australian consumers for telecommunications services. This report (also known as the Division 12 report) meets this obligation for the 2005–06 financial year.

The Division 12 report monitors prices consumers pay for fixed-line or PSTN (public switched telephone network) services and mobile telephony services. For fixed-line services, it analyses prices paid by residential and business consumers for basic access service and for local, national long-distance, international and fixed-to-mobile calls. For mobile telephony services, this report covers prices paid by consumers for services on the global system for mobiles (GSM) and code division multiple access (CDMA) networks.

To determine price changes, the ACCC uses a price index methodology and data and other information provided by Telstra, SingTel Optus, AAPT, Primus, Vodafone, and Virgin Mobile. The methodology used to determine price changes can be found in section 7.

The ACCC has begun collecting information from selected internet services providers[1] to construct price indexes for dial-up and broadband internet services to include in future Division 12 reports. It has also started collecting data on third generation (3G) mobile services[2] for inclusion in the mobile services index in future reports.

2.2 Structure of the report

This report describes changes in prices paid by consumers for telecommunications services in Australia for the 12 months to 30 June 2006.

It also provides information on price changes in previous years and includes a time series of price index numbers and points contribution for telecommunications services in statistical tables at the end of the report.

Figure 2.1 shows the structure of the report and the telecommunications index used to derive the price change estimates. Aggregated results for the telecommunications market as a whole are presented first in section 3 while section 4 describes changes in PSTN prices and section 5 presents changes in mobile services prices in more detail.

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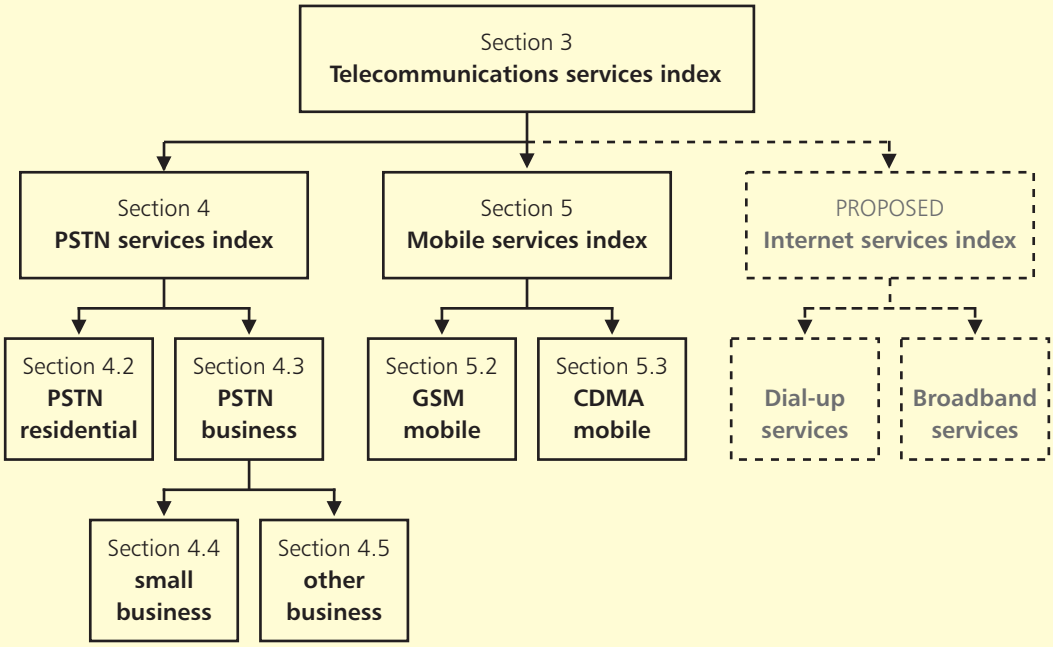
1 Telstra, Optus, AAPT, Primus, iiNet and Verizon (formerly MCI Worldcom).

2 Provided by Telstra, Optus, Vodafone and Hutchison.

Figure 2.1 Structure of the report and telecommunications index



3 Telecommunications services index

The telecommunications services index shows how average prices have changed for consumers of PSTN (fixed-line) and mobile services overall.

The ACCC derives this index using the price indexes for PSTN services for all consumers and for mobile telephony services. It then constructs the sub-index for PSTN services for all consumers with reference to baskets of services for residential and business consumers. It afterwards calculates the sub-index for mobile services by deriving sample prices for bundles of post-paid and prepaid mobile telephony services that represent the consumption patterns of five defined user groups. Details of the results of the sub-indexes are outlined in subsequent chapters of this report.

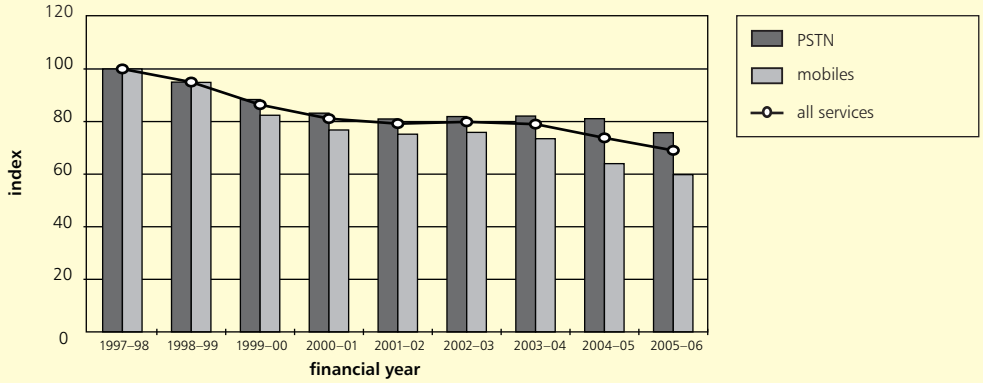
3.1 Main changes

Overall, the prices paid by consumers for telecommunications services in Australia fell by 6.5 per cent in 2005–06.

This fall was driven by a decline of 6.6 per cent in average prices paid for PSTN services, while the average price paid for mobile telephony services fell by 6.5 per cent.

As figure 3.1 shows, since 1997–98, the overall telecommunications index has fallen by 30.6 per cent from 100 to 69.4. Over this period, the PSTN services index has fallen by 24.2 per cent from 100 to 75.8 and the mobile services index by 39.5 per cent from 100 to 60.5.

Figure 3.1 Telecommunications services index by PSTN and mobile telephony services, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Vodafone, Virgin Mobile, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

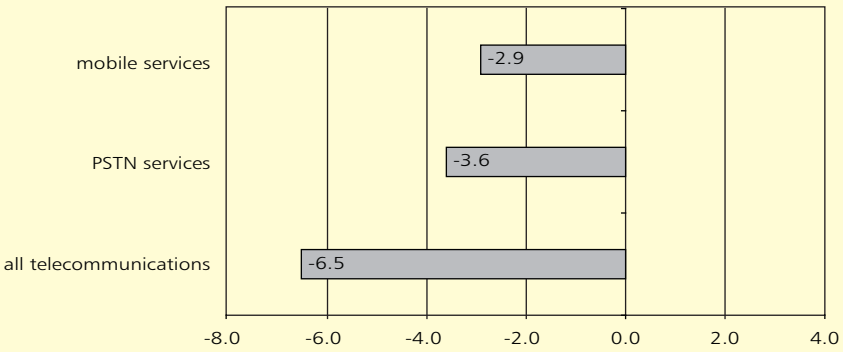
Note: base year is 1997–98

In previous years, falls in the price of mobile services have often exceeded falls in PSTN prices. In 2005–06, however, falls in PSTN prices had a greater effect on the movement in the overall telecommunications index. The points contribution of the PSTN and mobile services indexes to the telecommunications services index indicate this.

Points contribution analysis indicates the percentage points that a component (in this case, a service) contributes to the change in an index in a particular year. That is, it shows how each service in the telecommunications services basket contributes to the movement in the telecommunications services index.

Figure 3.2 shows that of the overall index decline of –6.5 per cent, PSTN services accounted for –3.6 points and mobile services for –2.9 points.

Figure 3.2 Points contribution of the PSTN and mobile services indexes to the telecommunications index, 2005–06



4 PSTN services index

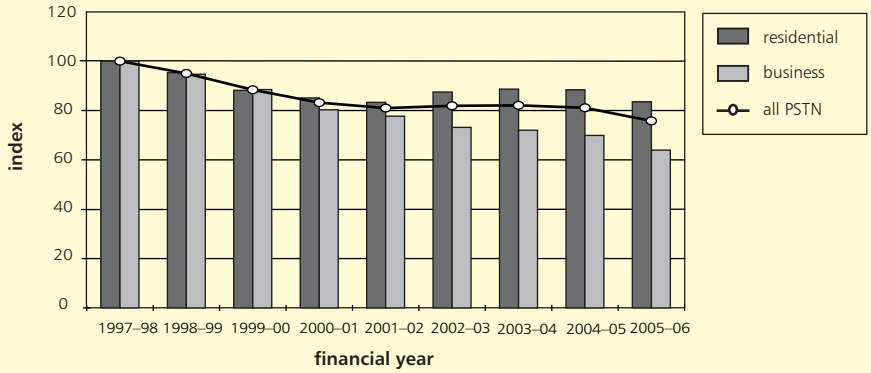
The PSTN services index summarises price movements for all consumer groups. The ACCC derives the index by calculating the weighted average price change of each PSTN service in the study for business and residential consumers. The price changes for each PSTN service are then aggregated into a single PSTN index for all consumers.

4.1 Main changes

Prices for PSTN services fell by an estimated 6.6 per cent in 2005–06. Since the index base year of 1997–98, the average price of a basket of PSTN services consumed by all consumers (residential and business combined) fell by 24.2 per cent.

Figure 4.1 illustrates how the PSTN residential and business indexes correlate with the overall PSTN services index. The PSTN residential index decreased by 5.5 per cent from 88.4 in 2004–05 to 83.5 in 2005–06. The PSTN business index fell by 8.6 per cent from 69.9 in 2004–05 to 64.0 in 2005–06. These results indicate that price falls for business consumers continued to exceed those for residential consumers.

Figure 4.1 PSTN services index by residential and business consumer group, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

Note: base year is 1997–98.

Table 4.1 indicates the percentage changes in the PSTN services index by each service in the PSTN basket over the past five years. Figure 4.2 shows the change in the share of total expenditure by consumers on each of the PSTN services between the base year of 1997–98 and 2005–06.

Average prices paid by PSTN consumers for basic access decreased in 2005–06 by 2.4 per cent—the first time this average price fell since carriers began 'rebalancing' PSTN prices. Despite this recent-period price fall, basic access charges have increased over the long-term—by 23 per cent since 2001–02 and by 75 per cent since 1997–98. Figure 4.2 further shows that the process of rebalancing PSTN charges has resulted in the share of consumers' spending on basic access in their total spending on PSTN services doubling from 19 per cent in 1997–98 to 40 per cent in 2005–06.

Table 4.1 Year-on-year percentage change in the PSTN services index by service type, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
basic access	13.2	12.4	6.8	5.2	**–2.4**
local calls	–11.7	–3.8	–3.3	–7.7	**–9.5**
national long-distance	–8.7	–4.7	–1.9	–3.1	**–6.9**
international	–15.3	–5.8	–5.9	–4.4	**–8.8**
fixed-to-mobile	–3.2	–2.4	–2.2	–3.8	**–10.5**
PSTN services index	–2.6	1.0	0.2	–1.2	**–6.6**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

The fall in average prices for basic access in 2005–06 may have been influenced by several factors. First, this could be due to the carriers' treatment of discounts they provide to customers who acquire a bundle of telecommunications services—carriers may be allocating the discounts to basic access only. Second, carriers such as Telstra have offered discounts on connection charges for second lines acquired by customers.[3] And third, the price fall may have been affected by Telstra's treatment of its discounts to pensioners, as these discounts are offset against basic access revenues only.

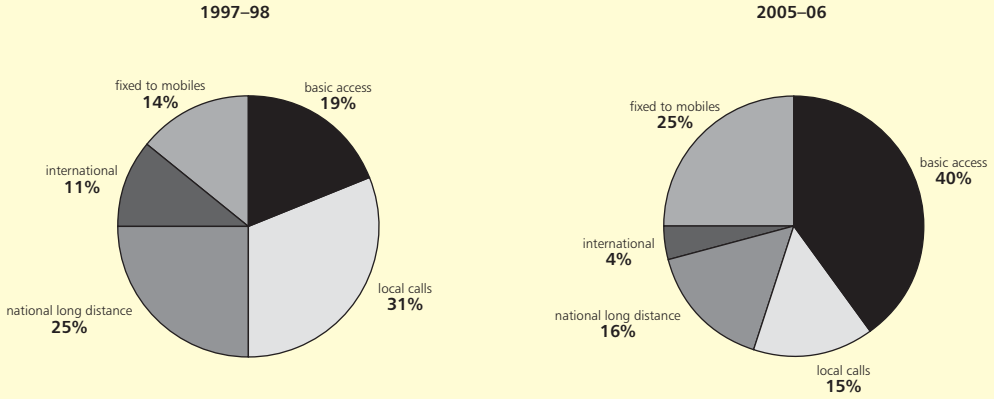
The price of local calls fell by 9.5 per cent in 2005–06, by 22 per cent since 2001–02 and by 49 per cent since 1997–98. Figure 4.2 shows that between 1997–98 and 2005–06 the proportion of consumer total expenditure on local calls halved from 31 per cent to 15 per cent.

The price fall for local calls in 2005–06 could have been affected by several factors such as the treatment of bundling discounts, the treatment of per-call revenues from customers who subscribe to capped calling plans,[4] and carriers' rebalancing of charges for calls and basic access.

3 In the index, basic access revenues include revenues from line connections and line rental.

4 Capped calling plans refer to the bundling of basic access and discounted local calls and other PSTN calls for a fixed monthly price.

Figure 4.2 Comparison of share of total consumer PSTN expenditure by service, 1997–98 and 2005–06



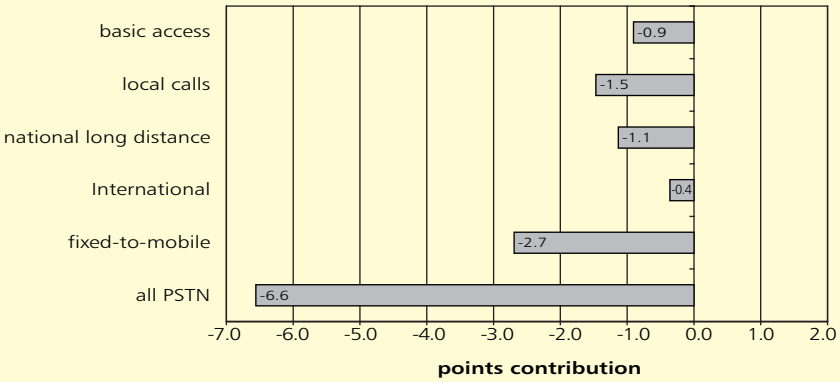
Source: data supplied by Telstra, AAPT, Primus, Optus and One.Tel.

Table 4.1 above shows that the prices of other call services—national long-distance, international and fixed-to-mobile calls—also fell during 2005–06 and since 2001–02.

As figure 4.2 above illustrates, while expenditure on local, national long-distance and international calls as a share of total expenditure on PSTN services has been falling, the proportion spent on fixed-to-mobile calls has gone up. This is due to the growth of the mobile services market from 3.5 million subscribers in 1997–98 to about 17.8 million[5] subscribers in 2005–06.

Figure 4.3 indicates each service's points contribution to the PSTN services index in 2005–06. The decrease in basic access prices contributed –0.9 points to the change in the PSTN services index. Fixed-to-mobile calls contributed –2.7 points while local calls, national and international calls contributed –1.5, –1.1 and –0.4 points respectively. Accordingly, there was an overall decrease of 6.6 per cent in the average price of a basket of PSTN services consumed by all consumers in 2005–06.

Figure 4.3 Points contribution of PSTN services to the PSTN index, 2005–06



Source: data supplied by Telstra, Optus, AAPT and Primus.

5 GSM and CDMA services reported by carriers providing information for the purpose of this report.

Table 4.2 outlines percentage changes in the PSTN index and price trends for residential and business consumers over the past five years. The results show that business consumers have experienced consistently declining prices. In contrast, residential consumers have experienced either price increases or smaller price decreases compared with business consumers over the same period. Since 1997–98, PSTN prices for business consumers fell by a total of 36 per cent while prices paid by residential consumers for the same services have fallen by about 16 per cent.

Table 4.2 Year-on-year percentage changes in the PSTN services index by consumer group, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
Residential	–2.2	5.0	1.4	–0.3	**–5.5**
Business	–3.2	–5.8	–1.6	–2.9	**–8.6**
PSTN services index	–2.6	1.0	0.2	–1.2	**–6.6**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

Note: base year is 1997–98.

The decrease in the PSTN business index since 1997–98 is primarily due to lower prices paid by 'other business' (that is, larger business) consumers rather than those paid by small business consumers.

Prices paid for PSTN services by other businesses decreased by 7.7 per cent in 2005–06 and by about 51 per cent since 1997–98. On the other hand, prices for small business consumers decreased by 9.6 per cent in 2005–06 and by about 7 per cent since 1997–98.

Sections 4.2 to 4.5 of this report discuss these results further and show how the average price of each of the PSTN services has changed for residential, small business and other business consumers.

4.2 PSTN residential index

The ACCC derives the index for PSTN residential services from five individual sub-indexes for basic access, local calls, national long-distance, international and fixed-to-mobile calls.

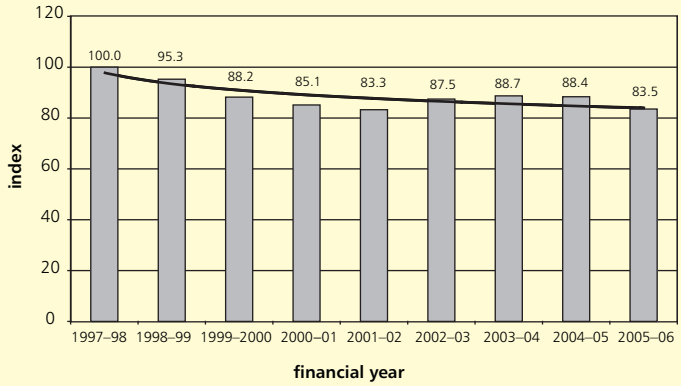
4.2.1 Main changes

In 2005–06 the average price of PSTN residential services fell by 5.5 per cent.

This follows a price fall of 0.3 per cent in 2004–05 and price increases of 1.4 per cent and 5 per cent in 2003–04 and 2002–03 respectively.

Since 1997–98 this index has fallen from 100 to 83.5, indicating an overall fall of about 16 per cent in the prices paid by residential consumers for PSTN services (figure 4.4).

Figure 4.4 Index for PSTN services for residential consumers, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

Note: base year is 1997–98.

4.2.2 Description and analysis of price changes by PSTN service for residential consumers

Overall prices for residential consumers of PSTN services fell by 5.5 per cent in 2005–06, as noted above. The overall movement of the PSTN residential index is determined by changes in the average price paid for individual services comprising the residential PSTN basket. Table 4.3 indicates the percentage changes for each service in the basket over the past five years, while figure 4.5 illustrates the annual percentage changes for each residential service.

Basic access service

The average price paid for basic access services by residential consumers decreased by 1.5 per cent in 2005–06.

As previously mentioned in section 4.1, in the index, basic access revenues include revenues from line connections and line rental. The fall in the average price of residential basic access services in 2005–06 may have been influenced by Telstra's discounts on connection charges for second lines acquired by residential customers. It may also have been affected by Telstra's treatment of pensioner concessions or discounts as these are offset against basic access revenues. Optus also introduced in August 2005 a new 'pension saver' plan for pensioners, offering $4 off monthly line rental and the first $8.50 of call usage for free.

The above price decreases for basic access may have been countered by some price increases for the service. In December 2005, Telstra increased its retail price for residential line rental (HomeLine Part) by $5 a month to $31.95 a month. This applied to consumers under the HomeLine Part plan who pre-select fixed-line call services, other than local calls, with a carrier other than Telstra.

Telstra also increased the price of its wholesale residential local services product, Home Access, in December 2005. Home Access is a wholesale input used by Telstra's wholesale customers to provide local services (that is, line rental and/or local call services) to retail customers. The increase in Home Access prices may have led to resellers of Telstra's basic access service raising their own retail prices.

For example, in February 2006, Optus increased its line rental fees for long-existing plans by $2. Additionally, the line rental fee for its 'budget line saver' product introduced in September 2005 increased by $2 to $26.95.

Overall, from 1997–98 to 2005–06, the average price of basic access paid by residential consumers has increased by 95 per cent, and by about 33 per cent over the past five years.

Table 4.3 Year-on-year percentage changes in the PSTN residential index, 2001–2002 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
basic access	15.1	16.6	7.3	7.5	**–1.5**
local calls	–10.9	–1.2	–3.8	–11.1	**–9.0**
national long-distance	–8.5	–2.4	0.8	–1.7	**–5.6**
international	–15.6	–3.5	–5.8	–3.6	**–8.4**
fixed-to-mobile	–4.7	5.0	0.1	–1.8	**–9.3**
PSTN residential	–2.2	5.0	1.4	–0.3	**–5.5**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

Local calls

The average price paid for local calls decreased by 9.0 per cent in 2005–06 and by 23 per cent in the past five years. Since the base year of 1997–98, the average price of local calls has fallen by 49 per cent.

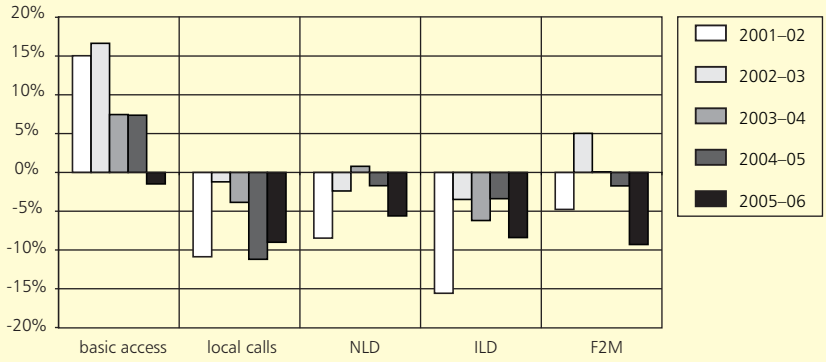
As discussed in section 4.1, the fall in local prices may have reflected the introduction during 2005–06 of capped calling plans for fixed-line services. Under these plans basic access and discounted local calls and other PSTN calls are bundled for a fixed monthly price. The bundling of mobile and internet services with PSTN services for a fixed monthly price has also been increasing among telecommunications consumers. The increasing take-up by consumers of these capped calling plans, or of bundled telecommunications services, could be a factor in the decreasing prices for local calls.

Optus, for example, introduced in September 2005 'OptusOne $69' with a subscriber paying $69 per month and using up to $120 of local calls and $120 of mobile calls, and with the monthly fee including line rental and mobile access. AAPT, in the same month, launched a broadband (512 Kb speed) and home phone (local and long distance calls) bundle for customers subscribing to broadband for the first time. Telstra introduced its HomeLine Ultimate product available for purchase from April to June 2006; the monthly charge of $89.90 includes basic access, local calls and national long-distance calls.

National long-distance calls

The average price paid by residential consumers for national long-distance calls decreased by 5.6 per cent in 2005–06 and by about 9 per cent in the past five years. Since the base year of 1997–1998 prices for this service have decreased by 31 per cent for residential consumers. The result for 2005–06 is a continuation of the trend of decreasing prices for this service since 1997–98.

Figure 4.5 Year-on-year percentage change in the price index by PSTN service for residential consumers, 2001–02 to 2005–06



Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

International calls

The average price paid by residential consumers for international long-distance calls decreased by 8.4 per cent in 2005–06 and by 20 per cent during the past five years.

The result for 2005–06 is a continuation of the trend of decreasing prices for this service since 1997–98.

The average price paid for international long-distance calls has fallen by 66 per cent since the base year 1997–98 for residential PSTN consumers. While this decline is the largest of all call services in the residential PSTN index, as residential consumer spending on international calls accounts for only 4 per cent of total expenditure on residential PSTN services, price changes for this service affect the overall movement of the index less than other call services.

Fixed-to-mobile calls

In 2005–06 the average price paid by residential consumers for fixed-to-mobile calls decreased by 9.3 per cent.

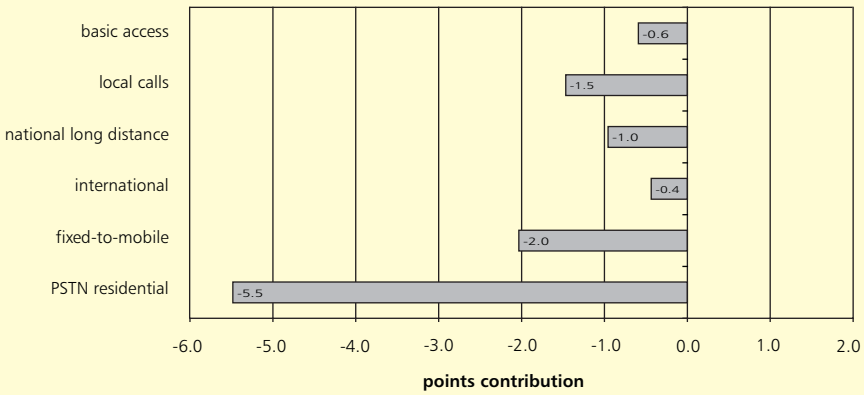
The average price paid for fixed-to-mobile calls for residential consumers has decreased by 6 per cent over the past five years and by 23 per cent since the 1997–98 base year.

Points contribution

The points contribution of individual service components to the weighted average price change for the PSTN residential services is shown in figure 4.6.

As shown in figure 4.6, local, national, international and fixed-to-mobile calls contributed –1.5, –1.0, –0.4 and –2.0 points, respectively, to the change in the PSTN index for residential consumers. A decrease in the average price paid for basic access, occurring for the first time after continuous price increases since 1999–2000, made a –0.6 point contribution.

Figure 4.6 Points contributions by individual PSTN services to the residential index, 2005–06



Source: data supplied by Telstra, Optus, AAPT and Primus.

4.3 PSTN business index

The index for PSTN business services is made up of the 'small business' and 'other business' sub-indexes. These sub-indexes can be disaggregated to show how prices have changed for each of the services in the business index basket.

4.3.1 Definition of business type

There is no single definition for 'small business' or 'other business' consumers across carriers. This can make it difficult to compare prices between business types and carriers as customers that may be classed as a 'small business' consumer by one carrier may be treated as an 'other business' consumer by another carrier. Carriers also regularly change their definitions, shifting revenues and usage between consumer categories and between years, making year-on-year comparisons within business categories problematic.

Telstra, for example, in 2005–06 restructured its retail customer base into three business units, to which the consumer types in this report correspond: Telstra Consumer Marketing and Channels (residential customers), Telstra Business Group (small business customers) and Telstra Enterprise & Government (other business customers). Small business customers include small and medium businesses with annual expenditure up to a certain amount, A$Y, on business plans and products only, or a mixture of business and residential products. 'Other business' customers include businesses with annual spending greater than A$Y on business plans and products.[6]

6 Telstra has updated the comparative figures for the previous period 2004–05 to reflect its reclassification of customer groups.

For 2005–06, Optus did not indicate any changes from 2004–05 in its business consumer definitions—a small business customer is defined as one with fewer than 20 phone lines, fewer than five employees, and a telecommunications bill with Optus of less than $1500 per month. Primus does not differentiate between residential and small business customers, noting that while its residential customers generally have five lines or less, a residential customer is simply one that acquires a residential service. If a small business chooses to acquire a residential package, Primus classifies it as a residential customer. AAPT defines a small business customer as a customer that is business or commercial in nature and has a monthly billed revenue below $1000 per month.

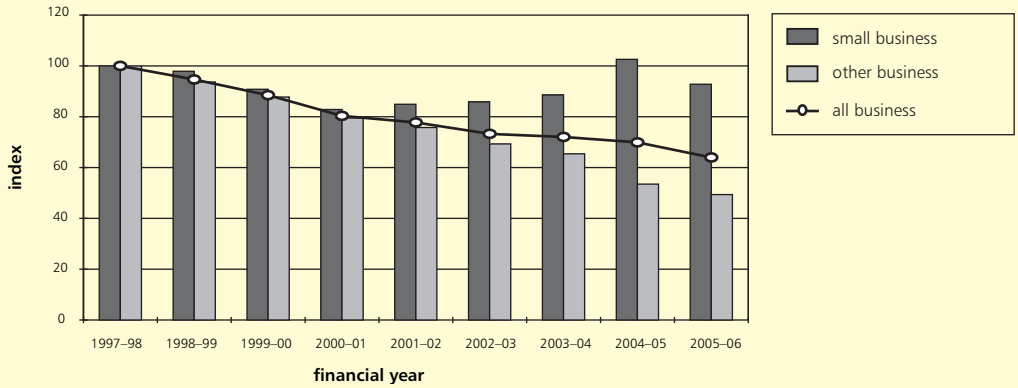
The ACCC therefore considers that the aggregate PSTN business index is the most reliable indicator of price change for business consumers as it includes all revenue and usage data from all business consumers each year regardless of definitional changes by carriers. However, the ACCC also considers that the small and other business sub-indexes still provide useful information on price trends between different-sized business consumers and has continued to include information on these sub-indexes in this report.

4.3.2 Main changes

As shown in figure 4.7, in 2005–06 the average price paid by business consumers for a basket of PSTN services decreased by 8.6 per cent as the PSTN business index fell from 69.9 in 2004–05 to 64.0 in 2005–06. Since the base year of 1997–98, the PSTN business index fell by 36 per cent, from 100 to 64.0.

The overall PSTN business index has steadily fallen since 1997–98. However, figure 4.7 shows that since 2001–02 the results have diverged according to business type and the average price paid by small business consumers has been increasing while the average price paid by other businesses has been falling.

Figure 4.7 PSTN business services index for all business by small and other businesses, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.
Note: base year is 1997–98.

Table 4.4 sets out the percentage changes in the overall PSTN business services index by each service in the PSTN basket over the past five years. Figure 4.8 shows the year-on-year rate of price change for business consumers by each service in the PSTN business basket.

Table 4.4 Year-on-year percentage changes in the PSTN business index, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
basic access	10.0	4.2	5.8	1.0	**–4.2**
local calls	–13.0	–9.2	–2.3	–0.7	**–10.4**
national long-distance	–8.9	–8.6	–6.8	–5.7	**–9.6**
international	–13.3	–14.3	–5.8	–7.6	**–10.4**
fixed-to-mobile	–1.8	–9.6	–4.7	–6.5	**–12.0**
PSTN business	–3.2	–5.8	–1.6	–2.9	**–8.6**

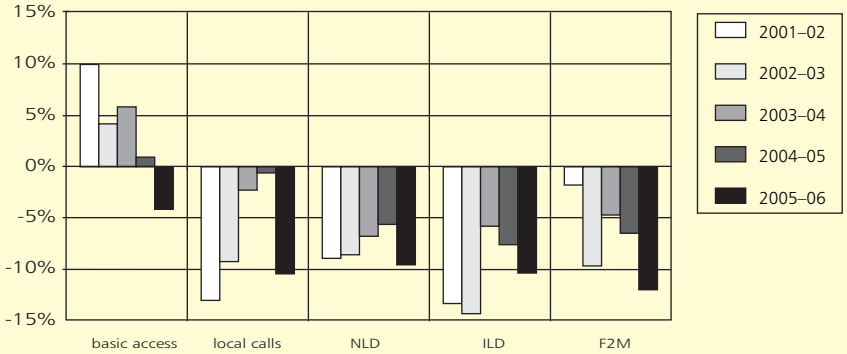
Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

In 2005–06 basic access prices for all business consumers decreased by 4.2 per cent. However, in the past five years, prices have increased by almost 7 per cent. Since the base year of 1997–98 prices for this service have increased by 42 per cent.

The average price paid by business consumers for local and national long-distance calls decreased by 10.4 and 9.6 per cent in 2005–06 respectively. The respective prices fell by 21 per cent and 27 per cent in the past five years, and by 49 per cent and 51 per cent since 1997–98.

Similarly, the average price of international and fixed-to-mobile calls in the business index fell by 10.4 per cent and 12.0 per cent in 2005–06. The respective prices fell by 33 per cent and 29 per cent in the past five years, and by 76 per cent and 45 per cent since the index base year of 1997–98.

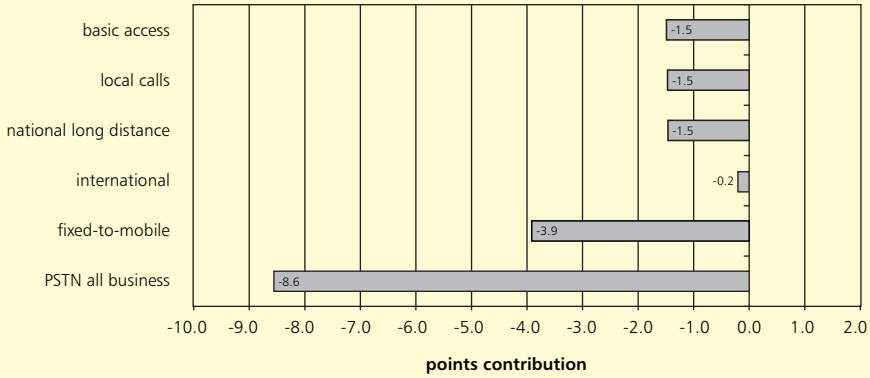
Figure 4.8 Year-on-year percentage change in the price index by PSTN service for all business consumers, 2001–02 to 2005–06



Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

Figure 4.9 shows the points contribution made by each service in the overall PSTN business index. It shows that basic access and all per-call services for business consumers contributed to the fall in the overall PSTN business index. In particular, fixed-to-mobile services contributed –3.9 points to the –8.6 per cent decline in the PSTN business index, reflecting the relatively large share (about 38 per cent) of total expenditure on business services that consumers spend on fixed-to-mobile calls.

Figure 4.9 Points contributions by individual PSTN services to the all business index, 2005–06



Source: data supplied by Telstra, Optus, AAPT and Primus.

As noted earlier in this report, while the overall PSTN business index has steadily fallen since 1997–98, the results have diverged according to business type and the average price paid by small business consumers has been increasing (until 2004–05) while the average price paid by other businesses has been falling. Table 4.5 below shows that in 2005–06, the index for small business consumers for PSTN services decreased by 9.6 per cent (and by about 7 per cent since 1997–98).

The average prices paid by other (larger) business consumers fell by 7.7 per cent in 2005–06 (and by 51 per cent since 1997–98).

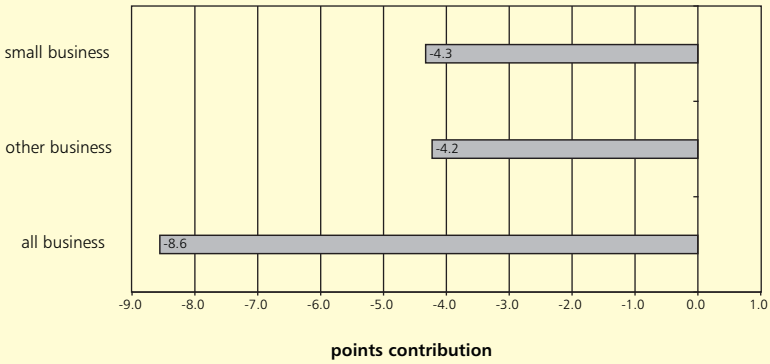
Table 4.5 Year-on-year percentage changes in the PSTN business services index by business type, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
small business	2.4	1.1	3.1	15.8	**–9.6**
other business	–4.7	–8.6	–5.6	–18.1	**–7.7**
PSTN business index	–3.2	–5.8	–1.6	–2.9	**–8.6**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

Figure 4.10 shows the points contribution made by the small business and other business indexes to the overall price movement in the 'all business index'. The 'small business index' for the basket of PSTN services contributed –4.3 points to the overall business index while the 'other business' index accounted for a similar –4.2 points. Both accounted for the overall 8.6 per cent decrease in the overall PSTN business index.

Figure 4.10 Points contributions by small and other business to the PSTN business index, 2005–06



Source: data supplied by Telstra, Optus, AAPT and Primus.

Note: the sum of the components' points contribution may not add up to the overall index change due to rounding.

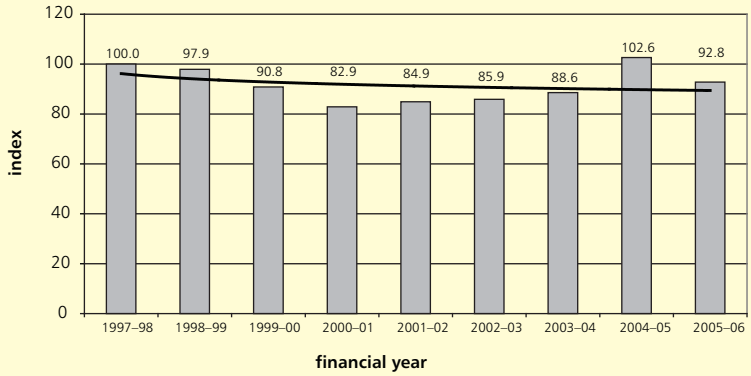
4.4 Small business index

4.4.1 Main changes

As indicated in table 4.6 below, the PSTN index for small business consumers declined by 9.6 per cent in 2005–06. This is the first decrease in the small business index after four consecutive years of increases. Possible reasons for the decrease in the index for 2005–06 are discussed below.

Figure 4.11 shows that since 1997–98, and because of the latest decrease, the PSTN index for small business consumers index has decreased from 100 to 92.8 or by 7.2 per cent.

Figure 4.11 Index for PSTN services for small business consumers, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

Note: base year is 1997–98.

4.4.2 Description and analysis of price changes by PSTN service for small business consumers

As noted in table 4.6 the small business index has decreased by 9.6 per cent in 2005–06.

The overall movement of the PSTN small business index has been influenced by the respective price changes of the services comprising the PSTN small business basket. These are described and set out in table 4.6 and illustrated in figure 4.12.

Table 4.6 Year-on-year percentage changes in the PSTN small business index by service type, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
basic access	16.2	7.5	7.7	14.5	**–9.3**
local calls	–3.0	–3.7	–3.0	17.8	**–9.0**
national long-distance	–6.6	–6.8	5.3	10.3	**–8.5**
international	–13.4	–7.3	–4.4	14.1	**–8.0**
fixed-to-mobile	–0.8	–4.3	1.4	19.8	**–11.0**
PSTN small business	2.4	1.1	3.1	15.8	**–9.6**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

The price changes for small business consumers may reflect more competitive offers provided by carriers in 2005–06 to this group of business consumers. However, the price movements could also have been affected by carriers' reclassification of business customers from year to year. The large increase in the small business index in 2004–05 and the subsequent fall in the index in 2005–06 could have been an effect of this consumer reclassification across reporting periods.

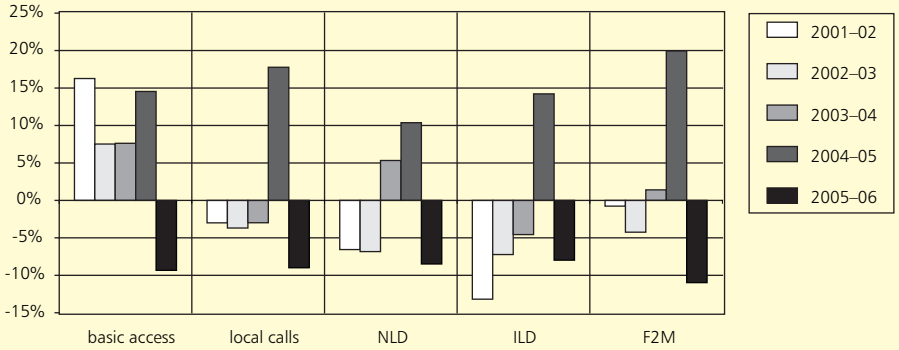
Basic access

In 2005–06 the average price paid by small business consumers for basic access decreased by 9.3 per cent. The average price of basic access for small business consumers increased by 20 per cent in the past five years and by 60 per cent since the 1997–98 base year.

Local calls

The average price paid for local calls decreased by 9 per cent in 2005–06 but remained almost unchanged, cumulatively, in the past five years. Since the base year of 1997–98, the average price of local calls has decreased by about 27 per cent.

Figure 4.12 Year-on-year percentage change in the price index by PSTN service for small business consumers, 2001–02 to 2005–06



Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

National long distance

The average price paid by small business consumers for national long-distance calls decreased by 8.5 per cent in 2005–06 but remained almost unchanged, cumulatively, over the past five years. Since the base year of 1997–1998 prices for this service fell by 20 per cent for small business consumers.

International calls

The average price paid by small business consumers for international long-distance calls decreased by 8 per cent in 2005–06. This latest decrease contributed to the cumulative decrease of 7 per cent for the past five years, and of 68 per cent since the base year 1997–98 for small business consumers' international calls.

Fixed-to-mobile calls

In 2005–06 the average price paid by small business consumers for fixed-to-mobile calls decreased by 11 per cent.

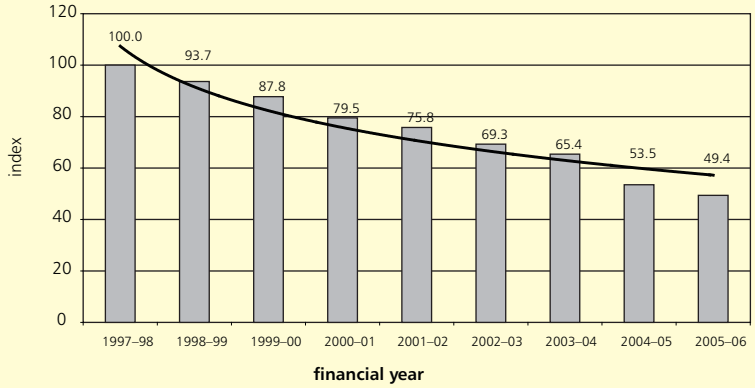
The average price paid for fixed-to-mobile calls for small business consumers has increased by about 4 per cent over the past five years. However, this decreased by 18 per cent since the 1997–98 base year.

4.5 Other business index

4.5.1 Main changes

The average prices paid by other (larger) business consumers fell by 7.7 per cent in 2005–06. As figure 4.13 shows, prices for other business consumers have been falling steadily, and since the 1997–98 base year the PSTN other business index has dropped from 100 to 49.4—a fall of about 51 per cent.

Figure 4.13 Index of PSTN services for other business consumers, 1997–98 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

Note: base year is 1997–98.

4.5.2 Description and analysis of price changes by PSTN service for other business consumers

As noted in table 4.7 the other business index has decreased by 7.7 per cent in 2005–06.

Revenue and usage information supplied by carriers and used to calculate yields (or proxy prices) for each service in the other business sub-index show that, while revenues for PSTN services for other business consumers have been falling, usage for each service has been increasing, leading to falling yields and a decrease in the PSTN index for other business consumers.

The overall movement of the PSTN other business index has been influenced by the respective price changes of the services comprising the PSTN other business basket. These are described below and set out in table 4.7 and illustrated in figure 4.14.

Table 4.7 Year-on-year percentage changes in the PSTN other business index by service type, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	**2005–06**
basic access	7.9	0.7	3.7	–14.8	**1.5**
local calls	–15.5	–10.8	–1.6	–18.8	**–11.9**
national long-distance	–9.4	–9.1	–14.8	–16.2	**–10.3**
international	–13.2	–15.8	–6.8	–21.9	**–12.0**
fixed-to-mobile	–1.9	–11.0	–8.5	–21.2	**–12.6**
PSTN other business	–4.7	–8.6	–5.6	–18.1	**–7.7**

Source: data supplied by Telstra, AAPT, Primus and Optus (except 2001–02 data, which was excluded from the index).

As for small business customers, the price movements for other businesses in 2005–06 could also have been affected by carriers' reclassification of business customers from year to year. The changes in the other business index over 2004–05 and 2005–06 (such as the large fluctuation in basic access index changes) could have been caused by this consumer reclassification across reporting periods.

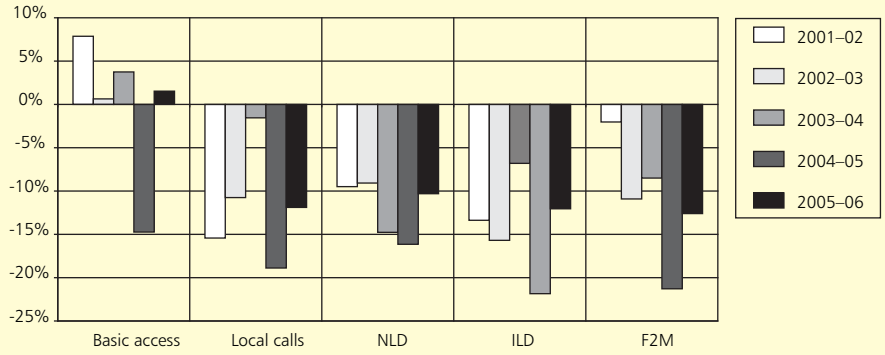
Basic access

The average price paid for basic access increased by 1.5 per cent in 2005–06; however, this *decreased* by about 10 per cent in the past five years. Since the base year of 1997–98, the average price of basic access has increased by 20 per cent. Figure 4.14 shows that basic access prices for other business consumers have been increasing year-on-year in recent years, apart from a large decrease in 2004–05.

Local calls

In 2005–06 the average price paid by other business consumers for local calls fell by 11.9 per cent and by 37 per cent in the past five years. Since the index base year of 1997–98, the average price of local calls for other business consumers has fallen by 61 per cent.

Figure 4.14 Price changes for individual PSTN services for other business consumers, 2001–02 to 2005–06



Source: data supplied by Telstra, AAPT, Primus, Optus (except 2001–02 data, which was excluded from the index) and (until 2000–01) One.Tel.

National long distance

In 2005–06 the average price paid by other business consumers for national long distance calls decreased by 10.3 per cent and by 42 per cent in the past five years. Since the index base year of 1997–98, the average price of long-distance calls for other business consumers has fallen by 63 per cent.

International calls

In 2005–06 the average price paid by other business consumers for international calls decreased by 12 per cent and by 46 per cent in the past five years. Since the index base year of 1997–98, the average price of international calls for other business consumers has fallen by 81 per cent.

Fixed-to-mobile calls

In 2005–06 the average price paid by other business consumers for fixed-to-mobile calls decreased by 12.6 per cent and by 44 per cent in the past five years. Since the index base year of 1997–98, the average price of fixed-to-mobile calls for other business consumers has fallen by 57 per cent.

5 Mobile services index

The mobile telephony services index is used to show how average prices have changed for consumers of GSM and CDMA prepaid and post-paid mobile services.[7] The index is calculated by estimating sample prices for bundles of mobile services that represent the usage patterns of consumers with very low, low, average, high and very high consumption of mobile services.[8]

The sub-indexes for post-paid and prepaid GSM and CDMA services are then aggregated to derive an overall GSM index, an overall CDMA index and an overall price index for mobile services. The sub-indexes are weighted in the index using revenue weights for each of the mobile services.

At present, the index does not include third generation (3G) mobile services since these are relatively new services.[9] However, the ACCC has started collecting data on 3G mobile services[10] to include in the mobile services index in future reports.

5.1 Main changes

The ACCC estimates that the average price paid by consumers for mobile telephony services fell by 6.5 per cent in 2005–06. Prices for GSM services fell by 6.7 per cent and those for CDMA services by 3.3 per cent.

These falls were likely due to the growing use by consumers of capped or 'bucket' plans introduced by carriers during 2004–05, resulting in large falls in prices paid for post-paid services. Specifically, prices for GSM post-paid services fell by 10.2 per cent and prices for post-paid CDMA services fell by 3.6 per cent.

Prices for consumers of prepaid GSM services fell by 0.8 per cent and prepaid CDMA prices fell by 2.2 per cent.

The main changes in the prices for mobile services are summarised in table 5.1 while the price trend for overall mobile services is represented in figure 5.1. The data indicate that overall average prices for mobile services fell by about 40 per cent since 1997–98.

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7 GSM is defined as global system for mobile communications; CDMA is defined as code division multiple access services. Both are digital cellular networks.

8 *Very low user group*: occasional consumers making 1–2 calls a week; *low user group*: occasional to regular consumers making 5–7 calls a week; *average user group*: regular to frequent consumers making 2 calls a day; *high user group*: frequent consumers who make 4–5 calls a day; *very high user group*: very frequent consumers who make 8–10 calls a day.

9 Hutchison launched its 3G service in 2003, and Telstra, Vodafone and Optus began their respective 3G services during 2005–06.

10 Provided by Telstra, Optus, Vodafone and Hutchison.

Table 5.1 Year-on-year percentage change in price indexes for mobile services, 2000–01 to 2005–06

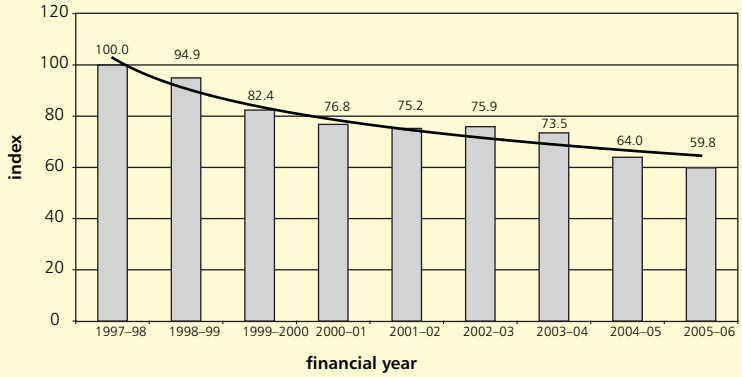
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
GSM						
post-paid	–5.4	–0.9	2.2	–1.0	–15.3	**–10.2**
prepaid	–13.7	–5.1	–0.9	–5.6	–5.6	**–0.8**
all GSM	–6.8	–2.2	1.1	–3.2	–12.9	**–6.7**
CDMA						
post-paid			–2.0	–1.5	–14.2	**–3.6**
prepaid			–3.6	–4.3	–12.4	**–2.2**
all CDMA			–2.3	–2.2	–13.8	**–3.3**
overall	**–6.8**	**–2.0**	**0.9**	**–3.2**	**–13.0**	**–6.5**

Source: data from Telstra, Optus, Orange, Vodafone, AAPT and Virgin Mobile, and published mobile plan/ service information.

In 2005–06, there were 17.8 million mobile services in operation (SIO).[11] This represents a growth of 4.4 per cent in the number of SIOs from the previous year 2004–05, and is lower than the 5.8 per cent year-on-year growth in the previous corresponding period. With the maturity of the mobile services retail market, it is not surprising that the annual growth in subscriber numbers has slowed.

Of all SIOs in 2005–06, 87 per cent were GSM services and 13 per cent were CDMA services.

Figure 5.1 Overall mobile services index, 1997–98 to 2005–06



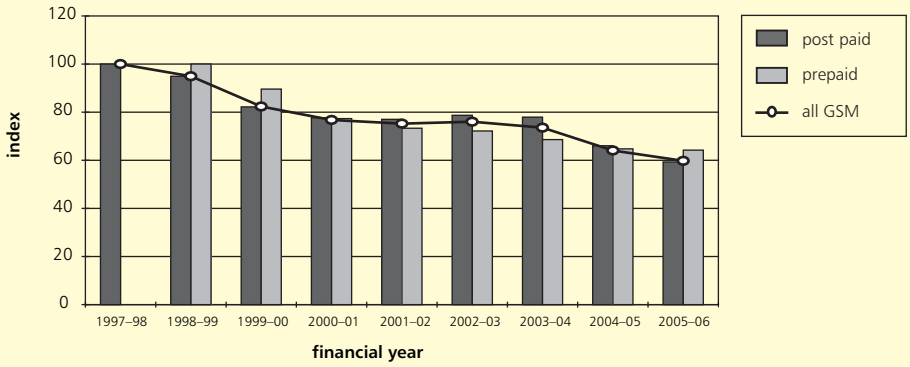
5.2 GSM services

As can be seen from figure 5.2 the GSM price index fell from 64.1 to 59.8 in 2005–06—a fall of 6.7 per cent.

The post-paid GSM index fell from 66.1 to 59.3 in 2005–06—a fall of 10.2 per cent, while the index for GSM prepaid services fell from 64.8 to 64.2—a fall of 0.8 per cent.

11 GSM and CDMA services reported by carriers providing information for the purpose of this report.

Figure 5.2 GSM mobile services index, 1997–98 to 2005–06



Source: CRU estimates to 2000–01; data from Telstra, Optus, Vodafone, AAPT, Virgin Mobile and published mobiles plan/service information.

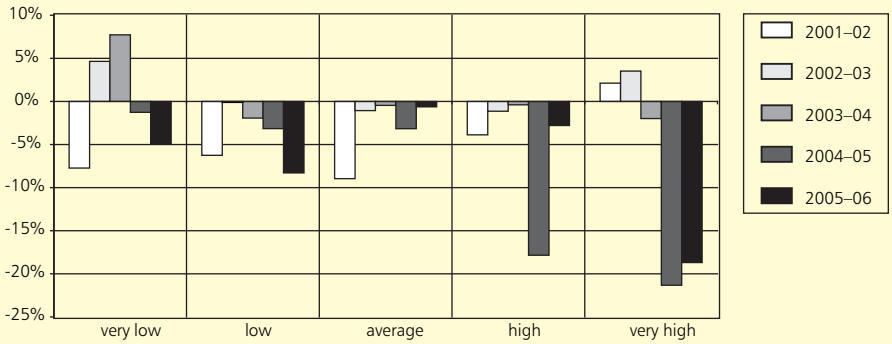
Notes: base year is 1997–98 for post-paid and 1998–99 for prepaid services; indexes/price changes are calculated in real price (2002–03) terms.

5.2.1 Post-paid prices

The ACCC estimates that the price index for GSM post-paid services fell from 66.1 in 2004–05 to 59.3 in 2005–06. Although the price had gone up in 2002–03 by 2.2 per cent, the cumulative decrease in the average price for GSM post-paid services from 1997–98 to 2005–06 was about 41 per cent.

The fall in average prices was 15.3 per cent in 2004–05, followed by a 10.2 per cent decline in 2005–06.

Figure 5.3 Year-on-year percentage change in the price index for GSM post-paid services by user group, 2001–02 to 2005–06



Source: CRU estimates to 2000–01; data from Telstra, Optus, Vodafone, AAPT, Virgin Mobile and published mobile plans/service information.

Notes: base year is 1997–98; indexes/price changes are calculated in real price (2002–03) terms.

User group sub-indexes (see figure 5.3 and tables at the end of this report) show that all user groups in the study experienced a fall in prices in 2005–06, with the very high user group experiencing the largest price fall of 18.7 per cent.

Over the five-year period from 2001–02, the largest fall in GSM post-paid prices was for the very high user group (35 per cent) followed by the high user group (21 per cent) and the low user group (13 per cent). The very low user group experienced an *increase* of 5.8 per cent.

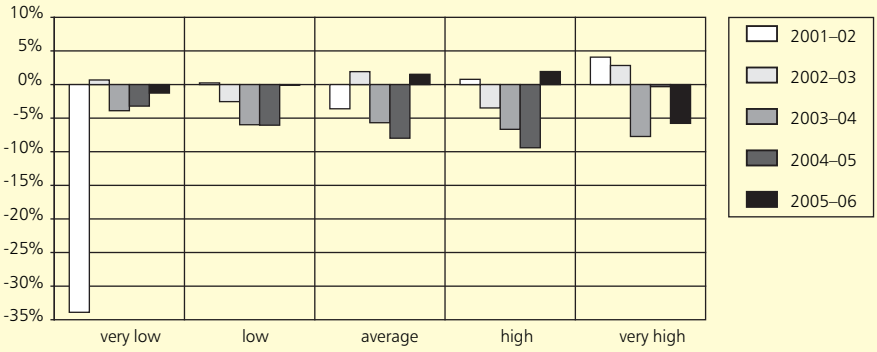
5.2.2 Prepaid prices

In 2005–06 the price index for GSM prepaid services decreased by 0.8 per cent from 64.8 to 64.2. The average price paid for GSM prepaid services has decreased every year in the study period albeit at different rates, with a cumulative decrease of about 36 per cent since 1997–98.

In 2005–06 prices paid for prepaid services fell the most for very high user groups (by 5.8 per cent). However, there were price increases for average and high user groups (see figure 5.4).

Over the five-year period to 2005–06, the largest fall in price was experienced by the high user group (almost 17 per cent). The second largest fall (14 per cent) was for the low user group.

Figure 5.4 Year-on-year percentage change in the price index for GSM prepaid services by user group, 2001–02 to 2005–06



Source: data from Telstra, Optus, Vodafone, AAPT, Virgin Mobile and published mobile plans/service information.

Notes: base year is 1998–99; indexes/price changes are calculated in real price (2002–03) terms.

5.3 CDMA services

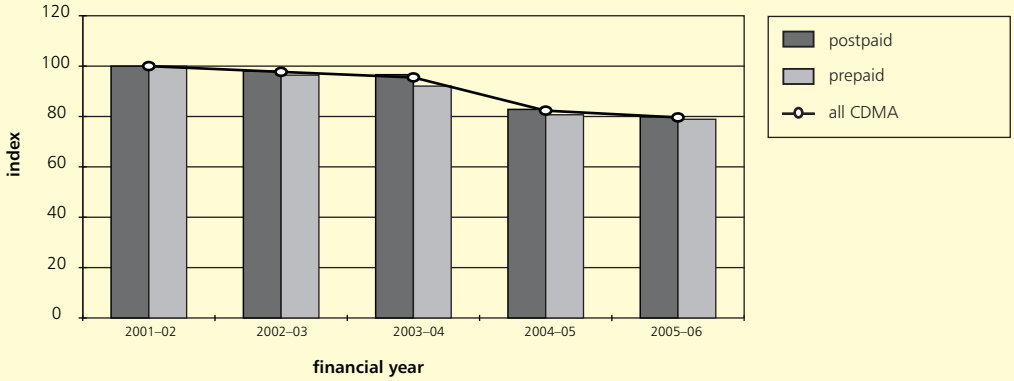
The ACCC began reporting on prices paid by consumers for CDMA services in 2002–03. Telstra and Hutchison (Orange) have operated CDMA networks, with other carriers (including Optus) reselling this service to their own customers.

However, during the 2005–06 period, Hutchison announced it was closing down its 800 MHz CDMA network by August 2006. Hutchison would migrate its 2G CDMA subscribers to its 3G network, and thenceforth operate only a 3G WCDMA network in Australia. During the transition program, Hutchison offered its 2G subscribers migrating to 3G services special deals such as free transfers and handset deals.

In late 2005, Telstra announced it would shut down its CDMA network and replace it with a 3G UMTS 850 MHz network. Telstra indicated its existing CDMA network would continue to operate until 2008 and UMTS services were expected in 2007.

In 2005–06 the average price paid for CDMA services fell by 3.3 per cent. Prices for CDMA post-paid services fell by 3.6 per cent while those for pre-paid services decreased by 2.2 per cent.

Figure 5.5 CDMA mobile services index, 2001–02 to 2005–06



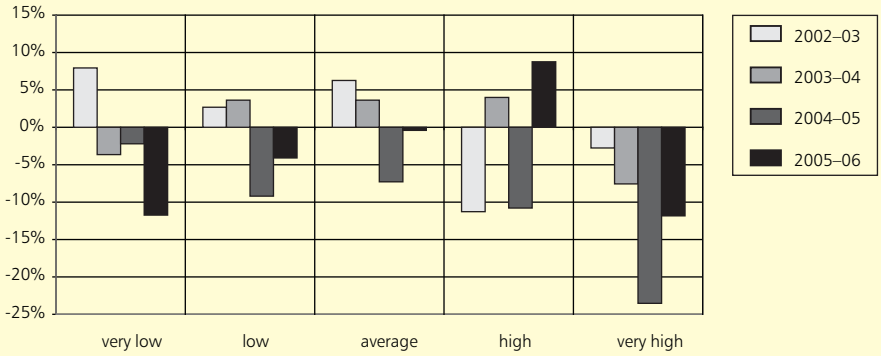
Source: data from Telstra, Optus and published mobiles plan/service information.

Notes: base year is 2001–02; indexes/price changes are calculated in real price (2002–03) terms.

5.3.1 Post-paid prices

The average price paid for CDMA post-paid services fell by 3.6 per cent in 2005–06. This was driven by falls of about 12 per cent in average prices paid by each of the very low and very high user groups (figure 5.6).

Figure 5.6 Year-on-year percentage change in the price index for CDMA post-paid prices by user group, 2001–02 to 2005–06



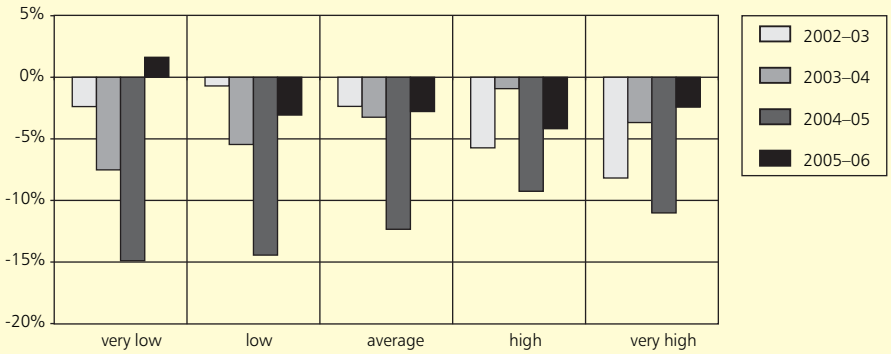
Source: data from Telstra, Optus and published mobiles plan/service information.

Notes: base year is 2001–02; indexes/price changes are calculated in real price (2002–03) terms.

5.3.2 Prepaid prices

The average price for prepaid CDMA services fell by 2.2 per cent in 2005–06 as against a 12.4 per cent fall in the previous year. As can be seen from figure 5.7, average prices for CDMA prepaid services fell across all user groups for all the years since 2001–02, except for the very low user group during the year 2005–06.

Figure 5.7 Year-on-year percentage changes in CDMA prepaid prices by user group, 2002–03 to 2005–06



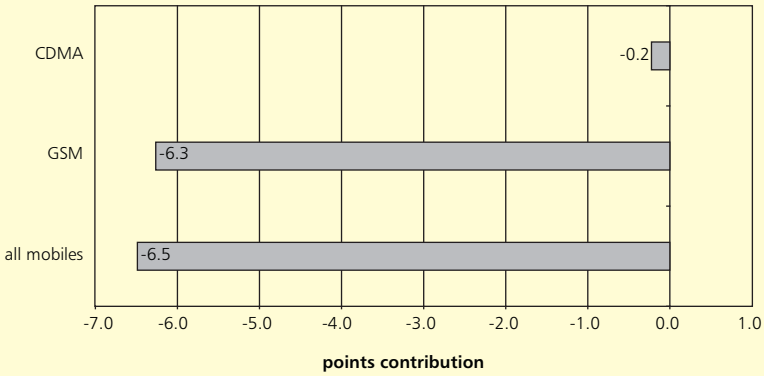
Source: data from Telstra, Optus and published mobiles plan/service information.

Notes: base year is 2001–02; indexes/price changes are calculated in real price (2002–03) terms.

5.4 Points contribution

Points contribution reflects the number of points that the GSM and CDMA indexes make to the overall change in the mobile services index. Figure 5.8 illustrates that the mobile services index fell by 6.5 per cent in 2005–06, of which falls in the GSM services index contributed –6.3 points and falls in the CDMA services index accounted for only –0.2 points. This reflects that, while price falls for GSM and CDMA services were –6.7 per cent and –3.3 per cent respectively, the change in the GSM index is given more weight because more consumers use and spend money on GSM services compared to CDMA services.

Figure 5.8 Points contribution by GSM and CDMA indexes to the mobile services index, 2005–06



5.5 Analysis of price changes for mobile services in 2005–06

A mobile service consumer, to make a mobile call, requires a handset, connection and ongoing access to a mobile network. These are typically sold through a wide range of pricing plans.[12] As there can be a high degree of cross-subsidisation among the individual components of particular phone plans, it is not possible to analyse changes in the overall price of mobile telephony services by only looking at, for example, charges per minute. However, once overall price change trends have been established, it is useful to analyse pricing plans available to consumers to identify factors that may have contributed to this price change. [13]

The ACCC's analysis of mobile pricing plans has shown that while there are some simplified call plans, carriers usually offer a range of plans with complex discounts, handset repayment plans, credits and free call options for consumers to choose from. With the growth rate of mobile phone users slowing, carriers appear to have intensified their marketing efforts to offer plans that encourage existing customers to increase their usage. One strategy is the marketing of so-called 'bucket' or capped plans.

12 While consumers are able to sign up to plans without handsets, the CRU approach prices plans with a handset as it is a basic component for using a mobile service.

13 ACCC, *Changes in the prices paid for telecommunication services in Australia 1999–2000*, April 2001, p. 67.

The ACCC identified a number of broad trends in post-paid and prepaid plans used to derive prices for mobile services in this year's report:

- Improvements in handset technology have raised their quality. While initial prices for these newer handsets were high, in 2005–06 they were being provided at low cost to prepaid and post-paid consumers and zero upfront cost to consumers on post-paid contract plans.
- Connection charges have fallen during 2005–06. Most carriers either did not charge new customers a connection charge or provided the equivalent amount in free calls if a connection charge was imposed.
- Exit fees may be charged when consumers sign up for a plan or a handset/plan package and they disconnect or switch plans or carriers within the contract term. These charges may include outstanding amounts owed on a handset or early termination fees for opting out of a pricing plan before the end of a minimum period.
- Mobile plan access charges, until 1998–99, were similar to fixed-line basic access in that a fee was payable solely for access to a network. The higher the access charge, the lower the cost per minute of each call. From about 1999–2000 carriers gradually introduced free calls with access so that, for example, a consumer on an access plan of $29 a month would receive the first $29 of calls 'free'. In 2005–06 minimum spend plans were common and were effectively the same as access plans—consumers must pay a minimum charge a month, with per-minute prices declining the higher the fixed minimum charge.
- Flagfalls[14] have become a standard fixed component for most mobile users contrasting with earlier years when some carriers did not have a flagfall. While the price of flagfalls overall has generally been increasing in the bundles priced for this study, there have been decreases for some consumers.

14 Flagfall is a fee applied at the start of a mobile voice call for the purpose of call connection, regardless of the length of the call.

6 Tables

Table 6.1 Telecommunications services index, 1997–98 to 2005–06

	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
PSTN services	100.0	95.0	88.4	83.2	81.0	81.9	82.1	81.1	75.8
mobile services	100.0	94.9	82.4	76.8	75.2	75.9	73.5	64.0	59.8
all telecommunications services	**100.0**	**95.0**	**86.4**	**81.1**	**79.1**	**79.9**	**79.0**	**73.8**	**69.0**

Source: data obtained from Telstra, SingTel Optus, AAPT, Primus, Vodafone, Virgin Mobile, pricing plans and other published information.

Table 6.2 PSTN services index by service; residential and business, 1997–98 to 2005–06

	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
All PSTN									
basic access	100	99.2	108.9	125.4	142.0	159.6	170.5	179.4	175.2
local calls	100	99.5	90.3	74.1	65.4	62.9	60.8	56.1	50.7
national long-distance	100	93.6	84.7	79.4	72.5	69.1	67.8	65.7	61.2
international	100	79.3	57.9	48.0	40.7	38.3	36.1	34.5	31.5
fixed-to-mobile	100	94.7	87.3	81.9	79.2	77.3	75.6	72.7	65.0
all PSTN	**100**	**95.0**	**88.4**	**83.2**	**81.0**	**81.9**	**82.1**	**81.1**	**75.8**
PSTN residential									
basic access	100	99.4	110.4	128.1	147.4	171.9	184.4	198.3	195.4
local calls	100	99.0	88.7	74.1	66.0	65.2	62.7	55.7	50.7
national long-distance	100	94.8	85.0	82.4	75.4	73.6	74.2	72.9	68.8
international	100	80.2	59.1	50.5	42.6	41.1	38.7	37.3	34.1
fixed-to-mobile	100	95.6	87.7	86.7	82.6	86.7	86.8	85.2	77.3
all residential	**100**	**95.3**	**88.2**	**85.1**	**83.3**	**87.5**	**88.7**	**88.4**	**83.5**
PSTN business									
basic access	100	98.9	106.4	120.9	133.0	138.5	146.6	148.0	141.9
local calls	100	100.5	92.9	74.1	64.4	58.5	57.2	56.8	50.9
national long-distance	100	91.7	84.3	74.5	67.8	62.0	57.8	54.5	49.3
International	100	77.4	55.4	41.4	35.9	30.8	29.0	26.8	24.0
fixed-to-mobile	100	94.1	86.9	78.3	76.9	69.5	66.2	61.9	54.5
all business	**100**	**94.7**	**88.5**	**80.3**	**77.7**	**73.2**	**72.0**	**69.9**	**64.0**

Source: data obtained from Telstra, SingTel Optus, AAPT, Primus, pricing plans and other published information.

Table 6.3 PSTN business services index; small and other business, 1997–98 to 2005–06

	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Small business									
basic access	100	94.7	105.6	114.6	133.2	143.2	154.2	176.6	160.1
local calls	100	107.2	98.4	75.5	73.2	70.5	68.4	80.6	73.4
national long distance	100	98.2	89.5	86.4	80.7	75.2	79.2	87.4	80.0
international	100	90.7	59.7	39.7	34.4	31.9	30.5	34.8	32.0
fixed-to-mobile	100	92.4	87.4	79.9	79.3	75.9	77.0	92.3	82.2
all small business	**100**	**97.9**	**90.8**	**82.9**	**84.9**	**85.9**	**88.6**	**102.6**	**92.8**
Other business									
basic access	100	100.5	106.7	123.1	132.8	133.7	138.7	118.2	120.0
local calls	100	98.6	91.4	73.7	62.3	55.6	54.7	44.4	39.1
national long distance	100	89.4	82.5	70.4	63.8	58.0	49.4	41.4	37.2
international	100	69.0	51.8	40.2	34.9	29.4	27.4	21.4	18.8
fixed-to-mobile	100	94.5	86.8	77.9	76.4	68.0	62.2	49.0	42.8
all other business	**100**	**93.7**	**87.8**	**79.5**	**75.8**	**69.3**	**65.4**	**53.5**	**49.4**
PSTN business	**100**	**94.7**	**88.5**	**80.3**	**77.7**	**73.2**	**72.0**	**69.9**	**64.0**

Source: data obtained from Telstra, SingTel Optus, AAPT, Primus, pricing plans and other published information.

Table 6.4 Mobile services index, 1997–98 to 2005–06

	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
GSM									
post-paid	100	94.9	82.2	77.7	77.0	78.7	78.0	66.1	59.3
prepaid		100	89.6	77.3	73.3	72.7	68.6	64.8	64.2
all GSM	**100**	**94.9**	**82.4**	**76.8**	**75.2**	**76.0**	**73.6**	**64.1**	**59.8**
CDMA									
post-paid					100	98.0	96.6	82.8	79.8
prepaid					100	96.4	92.3	80.7	78.9
all CDMA					**100**	**97.7**	**95.6**	**82.3**	**79.6**
all mobile services	**100**	**94.9**	**82.4**	**76.8**	**75.2**	**75.9**	**73.5**	**64.0**	**59.8**

Source: data obtained from Telstra, SingTel Optus, AAPT, Vodafone, Virgin Mobile, pricing plans and other published information.

Table 6.5 Mobile services index by network type and user group, 1997–98 to 2005–06

	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
GSM post-paid									
very low	100	80.5	57.2	47.6	44.0	46.0	49.6	48.9	46.5
low	100	92.4	73.9	63.6	59.6	59.5	58.4	56.5	51.8
average	100	98.3	84.0	74.4	67.7	67.0	66.7	64.6	64.2
high	100	93.3	81.5	76.5	73.6	72.7	72.4	59.5	57.8
very high	100	95.9	84.3	82.0	83.7	86.7	84.9	66.8	54.3
GSM prepaid									
very low		100	92.0	62.3	41.2	41.5	39.8	38.6	38.1
low		100	87.7	78.7	78.9	76.9	72.3	67.9	67.9
average		100	88.3	79.8	76.9	78.4	73.9	68.0	69.0
high		100	90.5	85.7	86.4	83.4	77.8	70.5	71.9
very high		100	89.4	80.1	83.4	85.7	79.1	78.9	74.3
CDMA post-paid									
very low					100	107.9	104.0	101.7	89.8
low					100	102.7	106.4	96.6	92.7
average					100	106.3	110.1	102.1	101.7
high					100	88.7	92.3	82.3	89.5
very high					100	97.2	89.9	68.7	60.6
CDMA prepaid									
very low					100	97.6	90.3	76.8	78.1
low					100	99.3	93.9	80.3	77.9
average					100	97.6	94.5	82.8	80.5
high					100	94.3	93.4	84.8	81.2
very high					100	91.8	89.3	78.7	76.8

Source: data obtained from Telstra, SingTel Optus, AAPT, Vodafone, Hutchison Telecommunications, Virgin Mobile, pricing plans and other published information.

Table 6.6 Points contribution to telecommunications services index, 1998–99 to 2005–06

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
PSTN services	–3.7	–4.8	–3.6	–1.6	0.6	0.2	–0.7	–3.6
mobile services	–1.3	–4.2	–2.5	–0.8	0.4	–1.3	–5.8	–2.9
all telecommunications services	**–5.0**	**–9.1**	**–6.1**	**–2.5**	**1.0**	**–1.1**	**–6.6**	**–6.5**

Source: data obtained from Telstra, SingTel Optus, AAPT, Primus, Vodafone, Hutchison Telecommunications, Virgin Mobile, pricing plans and other published information.

Note: The sum of the components' points contribution may not add up to the overall index change due to rounding.

Table 6.7 Points contribution to PSTN services indexes by service, residential and business, 1998–99 to 2005–06

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
ALL PSTN								
basic access	–0.2	1.9	3.3	3.7	3.7	2.2	1.8	–0.9
local calls	–0.1	–2.8	–5.0	–2.6	–0.8	–0.7	–1.4	–1.5
national long distance	–1.6	–2.3	–1.5	–1.9	–0.9	–0.4	–0.5	–1.1
international	–2.3	–2.6	–1.5	–1.1	–0.4	–0.3	–0.2	–0.4
fixed-to-mobile	–0.7	–1.3	–1.1	–0.7	–0.5	–0.5	–0.9	–2.7
all PSTN	**–5.0**	**–6.9**	**–5.9**	**–2.6**	**1.1**	**0.2**	**–1.2**	**–6.6**
PSTN RESIDENTIAL								
basic access	–0.1	2.3	3.7	4.4	5.1	2.5	2.6	–0.6
local calls	–0.3	–3.3	–4.7	–2.4	–0.3	–0.8	-2.1	–1.5
national long distance	–1.3	–2.6	–0.7	–1.9	–0.5	0.1	-0.3	–1.0
international	–2.5	–2.9	–1.6	–1.5	–0.3	–0.4	-0.2	–0.4
fixed-to-mobile	–0.4	–0.9	–0.2	–0.8	0.9	0.0	-0.3	–0.2
all residential	**–4.7**	**–7.5**	**–3.5**	**–2.1**	**5.0**	**1.4**	**-0.3**	**–5.5**
PSTN BUSINESS								
basic access	–0.2	1.3	2.7	2.5	1.1	1.7	0.3	–1.5
local calls	0.1	–2.2	–5.5	–2.9	–1.7	–0.4	–0.1	–1.5
national long distance	–2.1	–1.8	–2.5	–2.0	–1.7	–1.2	–0.9	–1.5
international	–2.0	–2.1	–1.3	–0.4	–0.5	–0.2	–0.2	–0.2
fixed-to-mobile	–1.2	–1.8	–2.6	–0.5	–3.0	–1.5	–2.1	–3.9
all business	**–5.3**	**–6.5**	**–9.3**	**–3.2**	**–5.8**	**–1.6**	**–2.9**	**–8.6**

Source: data obtained from Telstra, SingTel Optus, AAPT, Primus, pricing plans and other published information.

Note: The sum of the components' points contribution may not add up to the overall index change due to rounding.

Table 6.8 Points contribution to mobile telephony services index, 1998–99 to 2005–06

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
GSM					1.0	–3.0	–11.3	–6.3
CDMA					–0.1	–0.2	–1.7	–0.2
all mobile services					0.9	–3.2	–13.0	–6.5
GSM								
post-paid	–5.1	–12.6	–4.6	–0.6	1.4	–1.9	–6.6	–6.4
prepaid		–0.6	–2.2	–1.4	–0.3	–1.3	–6.3	–0.3
all GSM	–5.1	–13.2	–6.8	–2.0	1.1	–3.2	–12.9	–6.7
CDMA								
post-paid					–1.1	–1.3	–9.9	–3.1
prepaid					–1.5	–0.9	–3.9	–0.2
all CDMA					–2.7	–2.2	–13.8	–3.3

Source: data provided by Telstra, SingTel Optus, AAPT, Vodafone, Hutchison Telecommunications, Virgin Mobile, pricing plans and other published information.

Note: The sum of the components' points contribution may not add up to the overall index change due to rounding.

7 Methodology for determining price change

7.1 The index model

Since 1999–2000 the Division 12 report has used a basket approach to measure the prices consumers pay for telecommunications services. Under this approach, developed by the Communications Research Unit (CRU) of the Department of Communications, Information Technology and the Arts, index numbers are used to analyse movements in prices paid for a 'basket' of telecommunications services. An index number measures the price of the services in one period relative to another. They reflect price changes over time, but not price levels. The advantages and disadvantages of the index approach and the method of constructing indexes are detailed in the Division 12 report for 1999–2000. [15]

The price indexes are constructed using revenue, quantity and pricing plan data collected by the ACCC from several telecommunications service providers. They are then aggregated to derive a series of overall indexes.

The ACCC uses a different method to derive the PSTN services index than for the mobile telephony services index. Both methods are outlined below.

7.1.1 The PSTN services index

As the *Trade Practices Act* requires that the ACCC report on prices paid for telecommunications services, the ACCC monitors retail prices, after deducting discounts and concessions to reflect prices actually paid by consumers.

Data on actual prices paid by consumers is not readily available and would require regular and expensive sampling to obtain. Tariff documents also may not include information on discounts and short-term specials, which carriers increasingly offer, and many discount plans become effective only after a threshold value or number of calls has been made. It is extremely difficult to establish retrospectively the actual prices paid by consumers for particular services and the degree to which customers may have taken advantage of discounts.[16]

To try to capture the effects of discounts and specials on prices paid, carrier revenue and usage data have been used to derive a yield. The yield provides a proxy for price in the form of an estimate of the average price paid for a unit of a telecommunications service.

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15 A full description of the construction of the index and the underlying theory is contained in appendix 1 of *Changes in the prices paid for telecommunications services in Australia 1999–2000*, ACCC, April 2001.

16 The difficulty in obtaining data on prices paid meant that the standard or list prices were used to construct the weighted averages for each service reported in the first two Division 12 reports, but at a cost. Standard prices are the maximum consumers pay—they exclude all discounts and short-term specials.

Participating carriers provided separate revenue and usage estimates for five basic PSTN services—basic access, local calls, national long-distance, international long-distance and fixed-to-mobile services. For each of these, carriers were asked to further disaggregate the data into usage by residential, small business and other business consumers.

Using this data, a yield has been estimated for every PSTN service by consumer group for each year of the study (1997–98 to 2005–06). These yields were then converted into real terms[17] and used to construct a series of price indexes that show how prices paid for individual PSTN services by different consumer groups changed over time.

Individual carrier indexes for each PSTN service and consumer group category were then combined to derive indexes for PSTN services consumed by the three consumer groups for which data was collected—residential, small business and other business. These three indexes were then aggregated into an overall index for all PSTN services for all consumers. As with all aggregated indexes, the expenditure share of a service determines its importance in the overall index. For a given change in price, the index is influenced most by those services on which consumers as a group spend the most money.

The different levels of aggregation of the PSTN indexes are particularly useful for the ACCC. They allow it to monitor the changes in PSTN prices for all consumers through the 'overall' index as well as analyse how average prices change for individual services across particular consumer groups.

7.1.2 The mobile telephony services index

The Division 12 report monitors prices consumers pay for mobile telephony services provided on the GSM and CDMA networks, including both prepaid and post-paid (billed) mobile services.

In contrast to the PSTN index, yield data has not been used to construct indexes for mobile telephony services because of the marketing methods and pricing structures used to sell these services. To make a call on a mobile network, consumers require a mobile handset, connection and ongoing access to the network. Carriers and carriage service providers typically offer these services as part of a bundled package or plan. These plans include ongoing access to a carrier's network, charges for calls and other services and if required, connection and a handset.

Mobile plans can contain a high degree of cross-subsidisation. Historically, when carriers have offered low upfront charges for handsets, they have recovered these costs through higher charges for monthly access or outgoing calls. When choosing which plan to use, consumers can further trade off higher access charges for lower call charges and increasingly choose an array of discount options to suit their calling preferences.

The CRU's approach to the problem of estimating prices for mobile services has been to treat mobile telephony as a bundle of services and then to measure the prices paid by consumers for these bundles. The bundles[18], updated by the ACCC in 2003, are based on the number and pattern of calls made by consumers and include voice calls and short messaging service (SMS) messages to all mobile

17 In the index model, revenue and price data for PSTN services are expressed in 1999–2000 dollars, and in 2002–03 dollars for mobile services. The nominal values were converted to 1999–2000 values using the Australian Bureau of Statistics (ABS) consumer price index.

18 The new user group bundles are set out in the appendix for chapter 5 at the end of the 2002–03 Division 12 report.

networks, and voice calls to the fixed network. The bundles are derived from sample bill data provided by carriers in the study and so reflect the actual consumption patterns of Australian consumers. The price of each bundle is determined by adding the cost of the handset, connection, monthly access and call charges, net of any discounts and free calls.

The bundles used in this approach include all components necessary for the consumer to use a mobile telephone service including connection and access fees, handset costs, flagfall[19] and call charges. They also take into account any discounts or free calls offered by carriers.

Separate indexes are then constructed to compare the cost of each bundle over time. These indexes—GSM and CDMA, post-paid and prepaid—are then aggregated using a revenue-weighting process to form an overall mobile telephony index.

With regard to third generation (3G) mobile services, as these services are quite recent, they are not yet included in the mobile services index in the 2005–06 report. However, the ACCC has begun collecting information on these services for their inclusion in the mobile services index in future reports.

7.1.3 The internet services index

As part of the ACCC's Division 12 record keeping rules introduced in December 2004, particular carriers and carriage service providers[20] are required to provide information on dial-up and broadband internet services. This information will be used by the ACCC to estimate price changes for these services.

The ACCC is currently examining the appropriate methodology for estimating price change for internet services. Due to the characteristics of the service and because carriers and carriage service providers typically offer these services as part of a bundled package or plan, the ACCC preliminary view is that a 'bundling' methodology (similar to that used to estimate price change for mobile telephony services) is the most appropriate approach to pricing internet services.

7.2 Other methodology issues

7.2.1 Real prices

Price changes in the report are calculated using 'real' prices. This is done by adjusting nominal prices for the effects of inflation using the ABS consumer price index (CPI).

19 Flagfall is a fee applied at the start of a mobile voice call for the purpose of call connection, regardless of the length of the call.

20 Telstra, Optus, AAPT, Primus, iiNet and Verizon (formerly MCI Worldcom).

7.2.2 The goods and services tax (GST)

The GST affects the prices paid by consumers of telephony services. This affects business and residential consumers differently. While business consumers can claim a GST input credit on telecommunications services because these are business inputs, residential consumers cannot.

As a result, the estimated prices paid by business consumers for PSTN services are GST-exclusive while those paid by residential consumers include GST.[21] The prices for mobile telephony services are GST-inclusive as information was not available to estimate the proportion of mobile services used exclusively or partly for business.

7.2.3 Quality of service

Quality means all the non-price attributes of a product or service and includes performance, reliability and features of the product or service. The estimates obtained in this report do not take into account the effect of quality changes on price and consumers' utility of the services (that is, the enjoyment that consumers derive from consuming the services) due to the difficulty in quantifying such changes. The introduction of mobile phones with cameras and multimedia messaging service (MMS) (allowing wireless messages that include images, audio and video clips in addition to text) is a good example of how quality affects price. When these handsets were first introduced, they were more expensive than previous models but offered consumers more utility.

If changes in quality are ignored when analysing price changes for telecommunications services, those price changes will probably not reflect pure price changes, that is, price changes where quality remains unchanged. However, an adjustment for a change in quality is difficult to make. The Australian Bureau of Statistics has no satisfactory arrangement for adjusting the prices of these services in the CPI to reflect changes in quality, however significant they are.

Therefore, it is not possible to do anything other than acknowledge that there may be a bias.

7.2.4 Percentage changes and points contribution

The percentage changes used in this report are based on changes in the price indexes constructed for each of the PSTN and mobile services analysed. A complete set of index numbers for the telecommunications services covered is included in tables at the end of this report. Percentage changes are useful when summarising and analysing price movements over time.

The points contribution of an index component is the number of points that a component contributes to the overall index in a particular year. For example, analysis might show that, of a 10 per cent increase in the price index for a certain basket of services, 3 per cent is due to an increase in the price of a given individual service. The points contribution for a component of a given index is calculated by multiplying the revenue share of a component in a basket by the value of the index in that year. Analysis of points contribution provides an insight into the underlying dynamics in the price of the basket and shows the effects of different price changes within the basket on the index.[22]

21 As the GST was not in operation in Australia before 1 July 2000, no services included a GST component in their prices before 2000–01.

22 ACCC, *Changes in the prices paid for telecommunications services in Australia 1999–2000*, April 2001.

7.2.5 Record-keeping rules for the Division 12 report

In December 2004 the ACCC implemented a record-keeping rule (RKR) for the Division 12 report, after consulting with industry. Under s. 151BU of the Act, the ACCC has the power to make an RKR by written instrument and require that carriers and carriage service providers comply with it. The rules may specify what records are kept, how reports are prepared and when these reports are provided to the ACCC. The ACCC cannot require the keeping of records unless they contain information relevant to its responsibilities. These responsibilities include the operation of Parts XIB and XIC of the Act. Under Part XIB, Division 12, s. 151CM(1)(a) the ACCC is required to monitor and report each financial year on charges paid by consumers for telecommunications services.

Further information about the Division 12 RKR is on the ACCC website at www.accc.gov.au.

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