



Australian
Competition &
Consumer
Commission

Review of Telstra's price control arrangements

—an ACCC report

February 2005

Contents

Glossary.....	iii
Summary.....	v
1 Introduction.....	1
1.1 Recommendations.....	2
2 Background.....	7
2.1 Scope of this inquiry.....	7
2.2 Current price control arrangements.....	8
3 Objectives of price control arrangements.....	10
3.1 Objectives of current arrangements.....	10
4 State of competition in relevant markets.....	15
4.1 Measures of effective competition.....	15
4.2 Local telecommunications services.....	16
4.3 Domestic and international long-distance call services.....	21
4.4 Fixed-to-mobile call services.....	26
4.5 Mobile services.....	29
4.6 Dial-up and broadband internet services.....	30
5 Possible future price control arrangements.....	36
5.1 Price cap baskets.....	36
5.2 Other price control arrangements.....	51
5.3 Incentives to encourage efficient investment.....	61
5.4 Duration of price cap arrangements.....	66
5.5 Complementary arrangements.....	66
5.6 Mechanisms for assessing and enforcing compliance.....	69
6 Impact of current and future price control arrangements.....	73
6.1 Key elements of current price control arrangements.....	73
6.2 Impact of key elements on baskets of services.....	75
6.3 Likely impact of possible future price control arrangements.....	80
7 Distributional benefits and costs of current and possible future arrangements.....	84
7.1 Views of interested parties.....	84
7.2 Views of the ACCC.....	85
8 New and emerging technologies.....	93
8.1 Views of interested parties.....	93
8.2 Consultant report.....	94
8.3 Views of the ACCC.....	94

9	Protection of potentially disadvantaged customers	101
9.1	Current arrangements	101
9.2	Views of interested parties	102
9.3	ACCC assessment of the current arrangements for low-income consumers ...	104
9.4	ACCC assessment of current arrangements for non-metropolitan consumers	111
9.5	ACCC final recommendations for future arrangements	113
Attachment A	Telstra’s TFP measures and the appropriate level of ‘X’	118
A.1	Principles for determining the value of X	118
A.2	TFP measures for Telstra’s fixed-line infrastructure	120
A.3	TFP measures for the price-capped services	131
A.4	Estimates of TFP measures for Telstra	134
A.5	Economy-wide TFP	138
A.6	Anticipated developments expected to influence Telstra’s productivity performance.....	139
A.7	Summary and conclusions.....	141
Attachment B	Other existing schemes for low-income and vulnerable consumers	143
Attachment C	Public consultation	145
C.1	Submissions on the draft paper	145
C.2	Submissions on the discussion paper	146
C.3	Public meetings	146
Attachment D	Analysis of expenditure on Telstra telephone services—report by NATSEM	147

Glossary

ABS	Australian Bureau of Statistics
ACA	Australian Communications Authority
ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric Digital Subscriber Line is a digital technology that supports high speed services over conventional copper telephone lines. It is a high bandwidth downstream service (towards the customer) with a lower bandwidth upstream service.
ATUG	Australian Telecommunications Users Group
CAN	The Customer Access Network enables the connection of telephones and other customer equipment to switching technology. It consists of a network of conduits and pipes in the ground with a mixture of cables containing copper wires and fibre optics.
CCC	Competitive Carriers' Coalition
CDMA	Code Division Multiple Access is a technical standard for a second generation mobile communications network.
c-i-c	Commercial-in-confidence
CPI	Consumer Price Index
CTN	Consumer Telecommunications Network
Determination	<i>Telstra Carrier Charges—Price Control Arrangements, Notifications and Disallowance Determination No.1 of 2002</i>
FCC	Federal Communications Commission (telecommunications regulator in the United States)
FTM	Fixed-to-mobile call
HCC	Health Care Card
HFC	A Hybrid Fibre Coaxial cable network consists of both fibre optic and coaxial cabling.
HiBIS	High Bandwidth Incentive Scheme
ISDN	The Integrated Services Digital Network is a network that has evolved from the PSTN. ISDN services enable consumers to send and receive information at faster speeds and with greater reliability than is possible using the standard PSTN service. ISDN services are used for the carriage of information such as voice, data, high quality sound, text, still images and video.
KPI	Capital Price Index
KPIL	Capital price deflator for communications services

LCS	The Local Carriage Service is a service for local call resale. That is, the carriage of telephone calls from customer equipment at the consumer's premises to separately located customer equipment of a consumer in the same standard zone. (Standard zones is defined in the <i>Telecommunications (Consumer Protection and Service Standard) Act 1999</i>).
LIMAC	Low-income Measures Assessment Committee
LSS	The Line Sharing Service allows one telecommunications carrier to provide broadband services while another provides voice services, on the same telephone line, at the same time.
LTIE	Long-Term Interests of End-users
Minister	Minister for Communications, Information Technology and the Arts
MTAS	Mobile Terminating Access Service
PCC	Pensioner Concession Card
PIA	Payphone Industry Association
PSTN	The Public Switched Telephone Network is the standard fixed-line telephone network. It is primarily used for the supply of long-distance, fixed-to-mobile and mobile-to-fixed calls to consumers in Australia.
RAF	The Regulatory Accounting Framework record-keeping rule requires Telstra and others to provide comprehensive revenue, volume and cost data to the ACCC.
SIO	Service in operation
SMS	Short Messaging Service
TFP	Total Factor Productivity
TPA	<i>Trade Practices Act 1974</i>
TSLRIC+	Total Service Long-Run Incremental Costs, including a contribution to common costs.
ULLS	The Unconditioned Local Loop Service involves the use of unconditioned lines (typically copper) between consumers and a telephony exchange, where the line terminates. This service enables the supply of advanced, high-speed data services, such as xDSL, to customers as well as local and long-distance voice services.
USO	Universal Service Obligation
VoIP	Voice over Internet Protocol
WA Government	Western Australian Department of Industry and Resources
xDSL	A generic term for Digital Subscriber Line technologies

Summary

In this report, the ACCC provides its recommendations on the retail price control arrangements that should apply to Telstra from July 2005. The report also presents the ACCC's views on the effect of the current price control arrangements.

The ACCC's views follow extensive consultation by the ACCC with interested parties through written submissions and in 12 public meetings throughout Australia, including metropolitan, regional and remote locations.

Future price control arrangements

The ACCC recommends that price cap regulation should be retained on the services to which it currently applies, but not extended to other services. Further, the ACCC considers that supplies to larger business customers—those business customers that acquire more than five lines—should no longer be regulated under these arrangements.

Price caps

The ACCC recommends that:

- a basket containing line rental, local calls, domestic and international long-distance and fixed-to-mobile calls should decrease in price on average by 4 per cent per year in real terms, that is, be subject to a price cap of $CPI - 4$ per cent
- a basket containing only connections be subject to a price cap of CPI
- the basic telecommunications service consisting of line rental and local calls—which Telstra brands as HomeLine Part and BusinessLine Part—be price controlled such that
 - the line rental component of the basic telecommunications service is subject to a price cap of CPI
 - the price relativities—for the line rental component and the local call component—between the basic telecommunications service and the standard (i.e., most popular) line rental product are preserved. This would effectively require that any price movement in the HomeLine Part or BusinessLine Part package is less than the corresponding price movement for the standard line rental product.

Other price controls

The ACCC also recommends that:

- the current cap of 22 cents on the price of a local call should remain, and should apply to low income consumers irrespective of the amount they pay for line rental
- the current cap of 40 cents for a local call from payphones should remain

- dial-up internet calls to Internet Service Providers using the 0198 number range should be subject to the 22 cent local call cap. Although in practice these calls have been charged at local call rates, the ACCC believes that the price controls should specify a 22 cent cap
- while direct government initiatives may be a better way to improve access for regional and rural consumers, the ACCC does not recommend ending existing metropolitan/non-metropolitan local call relativity provisions
- discounts on line rental for schools would be more appropriately funded through direct government assistance
- Ministerial consideration of directory assistance charges should remain, but not be extended to other ancillary charges

Low income scheme

The ACCC considers that the current low-income scheme has delivered some important benefits to low income consumers. However, the ACCC believes that there are some changes that could improve the scope and robustness of the scheme.

The ACCC believes that future price controls should ensure that all low-income consumers can benefit from the low-income scheme, and that low-income consumers are not worse off if they participate in the scheme. Therefore, the ACCC recommends that concessions be extended or a safety net plan be implemented to ensure that low-income consumers are not worse off compared to standard users.

Measures to require and assess compliance

The ACCC recommends that the following measures should be adopted to better ensure that the benefits envisaged by the price control arrangements are realised:

- As the price-caps are designed so that anticipated cost savings are shared with consumers, they should not be weakened by allowing carry-in from previous price control periods
- To ensure that Telstra has the appropriate incentives to invest in its infrastructure and maintain its service quality, the ACCC recommends that future price control arrangements penalise Telstra where service quality has deteriorated
- Price movements for services—including those supplied in a bundle—should be measured in accordance with ACCC guidance.
- Proposed line rental price increases should be subject to ACCC assessment prior to implementation to ensure that they would be in compliance with the price control arrangements
- Carry-over credits between periods should be conditional on Telstra's overall compliance

Duration of the future price controls

The ACCC recommends that the next price control arrangements should apply for three years.

Current price controls

The ACCC considers that the current price control arrangements have provided some benefits to consumers, but that not all consumers have benefited to the same extent. Modelling of telecommunications expenditure suggests that telecommunications expenditure of residential consumers has been increasing sharply, with the expenditures of those consumers who make the least amount of calls increasing the most in percentage terms. However, at least part of this increase reflects the growing popularity of fixed-to-mobile calls rather than changes in price.

1 Introduction

On 23 April 2004, the Minister for Communications, Information Technology and the Arts (the Minister) directed the Australian Competition and Consumer Commission (ACCC) to hold a public inquiry about the current price control arrangements that apply to Telstra and the nature of the price control arrangements that should apply in the future.

The Minister directed the ACCC to provide a report setting out its findings from the inquiry. This report forms the ACCC's response to the Minister's direction.

Price controls

Price controls are considered to be a key telecommunications consumer safeguard. They are applied to Telstra to ensure that efficiency improvements are passed through to consumers as lower prices for telecommunications services in markets where competition is not yet fully developed. Price controls have also been used as a tool for achieving certain social policy/equity objectives.

Price control arrangements were first introduced in 1989. Since that time, Telstra (or its predecessors, Telecom and the Overseas Telecommunications Corporation) has been subject to price controls on a range of telephony services.

The current price control arrangements are contained in *Telstra Carrier Charges—Price Control Arrangements, Notifications and Disallowance Determination No.1 of 2002* (the Determination). The current Determination expires on 30 June 2005.

The government has commissioned periodic reviews of the price control arrangements. The reviews have been necessary as the telecommunications industry has gone through many changes since 1989. In particular, the telecommunications industry was supplied solely by two government-owned enterprises but has evolved to an industry now serviced by numerous carriers and carriage service providers.

In conducting this review, the ACCC is required to consider, among other things, the impact of the current arrangements, the form of any future price control arrangements, whether any complementary arrangements are necessary and mechanisms for assessing and enforcing compliance.

The ACCC is also required to examine the distributional impacts of price controls across different groups, such as metropolitan and regional consumers and residential and business consumers.

An issue for future retail price control regulation is the effect of new technologies, such as Voice over Internet Protocol (VoIP), on pricing structures and the impact of the price controls on those technologies.

The inquiry process

During the inquiry, the ACCC has consulted with relevant stakeholders, including the telecommunications industry, business, small business and residential consumer organisations and rural and regional organisations.

In June 2004, the ACCC commenced the inquiry by releasing a discussion paper. Submissions were requested by 9 August 2004. The ACCC received 18 public submissions in response to the discussion paper.

Public meetings were held in 12 locations around Australia, including metropolitan and regional locations, during late August and early September 2004.

Following consideration of the submissions and the views of interested parties in public meetings, the ACCC released its draft report on 9 November 2004. The ACCC sought submissions from interested parties by 3 December 2004. Seventeen public submissions were received in response to the draft report.

A full list of submissions and public meeting locations can be found in Attachment C to this report.

1.1 Recommendations

The ACCC's full recommendations for future price control arrangements are outlined in the table below.

Table 1.1 ACCC recommendations for future price control arrangements

<p>Services and market segments to be subject to price caps (Chapter 5.1.9)</p>	<p>The ACCC recommends that line rental, local calls, connection services, domestic and international long-distance calls, and fixed-to-mobile calls that are supplied to residential consumers and to business customers with five lines or less, should be subject to price caps.</p> <p>The ACCC also recommends that mobile telephony and internet services should not be subject to price caps.</p>
<p>Price cap basket structure (Chapter 5.1.10)</p>	<p>The ACCC recommends that line rental, local calls, domestic and international long-distance calls, and fixed-to-mobile calls should be included in a broad basket.</p> <p>The ACCC recommends that once-off connection services be in a separate basket.</p> <p>The ACCC also recommends that a discrete cap should apply to Telstra's basic telecommunications products consisting of line rental and local calls only, which is currently branded HomeLine Part and BusinessLine Part.</p>

<p>Level of price caps on baskets (Chapter 5.1.11)</p>	<p>The ACCC recommends that line rental, local calls, domestic and international long-distance calls and fixed-to-mobile calls should be subject to a price cap of CPI – 4 per cent. That is, the prices for an average bundle of these goods should fall by 4 per cent a year in real terms.</p> <p>The ACCC recommends that connection services should be subject to a price cap of CPI.</p> <p>The ACCC recommends that the basket containing HomeLine Part and BusinessLine Part should be subject to a price cap of CPI. The ACCC also recommends that the discount between the line rental price of these products and the standard line rental product should be preserved, and that the difference between the local call price of these products and the standard local call price should not be allowed to increase.</p>
<p>Carry-in credits (Chapter 6.1.2)</p>	<p>The ACCC recommends that carry-in credits from the current price control arrangements should not be allowed.</p>
<p>Untimed local calls (Chapter 5.2.2)</p>	<p>The ACCC recommends that the current cap of 22 cents on the price of a local call should remain.</p> <p>The ACCC also recommends retaining the current cap of 40 cents on the price of a local call from Telstra payphones.</p>
<p>Extended zones (Chapter 5.2.3)</p>	<p>The ACCC recommends that the current provisions relating to extended zones should remain.</p>
<p>0198 calls to ISPs (Chapter 5.2.4)</p>	<p>The ACCC recommends that the 22c price cap should also apply to 0198 calls made to ISPs.</p>
<p>Line rental for schools (Chapter 5.2.5)</p>	<p>The ACCC recommends that the current requirement that Telstra must offer a line rental service to schools at a price at or below the standard line rental offered to residential consumers should not be retained.</p>
<p>Directory assistance and other incidental charges (Chapter 5.2.6)</p>	<p>The ACCC recommends that Ministerial consideration of directory assistance charges should remain, but not be extended to other ancillary charges.</p>

<p>Measures to ensure that investment incentives in price-controlled services are not dampened (Chapter 5.3.2)</p>	<p>The ACCC recommends that the current arrangements for deemed price increases and decreases for quality of service changes be retained but amended to make them more effective.</p> <p>The ACCC recommends that the future price controls should:</p> <ul style="list-style-type: none"> ▪ only allow deemed price decreases for extraordinary capital investment ▪ remove the current precondition that a deterioration in quality must be to circumvent the price controls before a price increase can be deemed ▪ make it clear that a deemed price movement will be determined by assessing efficient net costs of investment ▪ maintain the ACCC’s discretion to deem price movements ▪ encourage Telstra to provide timely and complete information.
<p>Duration (Chapter 5.4)</p>	<p>The ACCC recommends that the future price control arrangements should apply for three years.</p>
<p>Complementary arrangements (Chapter 5.5)</p>	<p>The ACCC recommends that consideration be given to amending the tariff-filing provisions of Division 4 of Part XIB of the TPA such that:</p> <ul style="list-style-type: none"> ▪ the period of notice is increased from seven days to 15-20 days ▪ the substantial market power threshold for tariff-filing directions is changed so that they may be issued where the ACCC has a ‘reason to believe’ rather than is ‘satisfied’ ▪ non-price information may also be obtained ▪ the period of notice is in advance of proposed tariffs being made public, rather than when they take effect. <p>The ACCC also recommends that it would be appropriate that there be further investigation of Telstra’s call charging boundaries in non-metropolitan areas.</p>

<p>Mechanisms for assessing and enforcing compliance (Chapter 5.6)</p>	<p>The ACCC recommends that:</p> <ul style="list-style-type: none">▪ proposed line rental price increases are assessed by the ACCC prior to implementation to better ensure that they will not lead to price caps being breached▪ carry-over credits are made conditional on Telstra's compliance with the objectives of the price control arrangements and on the provision of timely information necessary to assess compliance▪ compliance systems discourage over-charging, and any over-charging that does occur is to be repaid in the following period▪ in quantifying price movements in the price controlled products, the treatment of discounts given due to product bundling should be subject to ACCC guidance▪ more robust information systems should be instituted by Telstra.
--	---

<p>Low-income consumers</p> <p>(Chapter 9.5.1)</p>	<p>The ACCC recommends that a low income scheme continue to be offered but that certain changes could improve the scheme.</p> <p>The ACCC recommends that the HomeLine plans in the low-income scheme should provide benefits for non-pensioner low-income consumers, either by extension of pensioner concessions to Health Care Cardholders or by introduction of a safety net scheme for Health Care Cardholders.</p> <p>The ACCC also recommends that the current exception allowing Telstra to charge more than 22c for a local call if a customer is receiving line rental at less than the standard rate should not apply to low income consumers.</p> <p>The ACCC also recommends that consideration be given to the impact of ancillary charges on low-income consumers.</p> <p>The ACCC recommends that LIMAC continues to explore ways to improve the public awareness of the low income scheme, and should have regular direct contact with Centrelink or other government or non-government agencies that distribute information to eligible consumers. The ACCC also recommends that consideration be given to more thorough use of Telstra's general information channels.</p> <p>The ACCC recommends that the current licence condition should be amended to require Telstra to comply with a low-income package and associated marketing plan that the Minister has specified.</p>
<p>Non-metropolitan consumers</p> <p>(Chapter 9.5.2)</p>	<p>The ACCC recommends that the existing price control arrangements for non-metropolitan consumers should be retained.</p>

2 Background

This chapter outlines the scope of this inquiry and provides background on the current price control arrangements that apply to Telstra.

2.1 Scope of this inquiry

The ACCC is required to consider the nature of price control arrangements that apply to Telstra.

The Minister's direction requires the ACCC to consider, among other things:

- the appropriate form of future price control arrangements, including the composition of baskets and the level of price caps
- the duration of any such arrangements
- the means of implementation of any such arrangements
- whether any other complementary arrangements are required to work in conjunction with the future price controls and, if so, their nature
- mechanisms for assessing and enforcing compliance.

In conducting the inquiry, the ACCC is directed to have regard to the following matters:

- (a) the current state of competition in each of the markets the ACCC considers relevant
- (b) the impact of the current price control arrangements, and possible future price control arrangements, on:
 - i) competition and the future development of competition, having regard in particular to the telecommunications anti-competitive conduct regime and telecommunications access regime under Parts XIB and XIC of the *Trade Practices Act 1974* (TPA)
 - ii) the availability, choice, quality and prices of services to consumers and any other impacts on consumers
 - iii) the telecommunications industry, including on economically efficient investment decisions
- (c) the distribution of the short-term and long-term community and economic benefits and costs, including the impacts on different types of households and business consumers and geographic areas, from the current price control arrangements and, possible future price control arrangements, in particular, relating to any re-balancing of line rental and call charges

- (d) the implications of new and emerging technologies on price control arrangements and of price control arrangements on new and emerging technologies
- (e) the appropriateness of the current price control arrangements, and possible future price control arrangements for the protection of potentially disadvantaged residential and business customers in both metropolitan and rural areas.

2.2 Current price control arrangements

At present, Telstra is subject to a number of price control arrangements. Of these, the ACCC believes the following price control arrangements are of most relevance to this inquiry:

- revenue-weighted price movements for a basket of services containing local, trunk (which includes domestic long distance and fixed-to-mobile services) and international calls must not exceed CPI – 4.5 per cent. This means that Telstra is entitled to change the individual prices of these services as long as the aggregate price of all the services in the basket declines by 4.5 per cent annual in real terms (i.e. net of inflation)
- a cap of CPI + 4.0 per cent on a basket of business and residential line rentals
- a cap of CPI – 0 per cent applies to a basket of connection services.

The Determination provides that each price cap is an independent price cap and is not subject to any overall price cap. That is, price movements for each basket do not need to fit within a weighted average price movement for all services.

Other price controls

The Determination also provides for a number of other price controls that apply to a range of services.

- The revenue-weighted average untimed local call price for residential and charity customers in non-metropolitan Australia in a given financial year is not to exceed the revenue-weighted average untimed local call price for residential and charity customers in metropolitan Australia in the previous financial year by more than 0.4 per cent.
- The revenue-weighted average untimed local call price for business customers in non-metropolitan Australia in a given financial year is not to exceed the revenue-weighted average untimed local call price for business customers in metropolitan Australia in the previous financial year by more than 0.4 per cent.
- The price for untimed local calls is not to increase above 22 cents for calls made from a residential or business phone, and 40 cents for calls made from a public phone, except in the case of discount plans when a customer may be required to pay more than 22 cents per local call.

- Calls in and between adjacent extended zones, and Bigpond calls made from these zones, are required to be charged as untimed local calls, and a price cap of 27.5 cents per 12 minute block applies to preferential calls.
- Line rentals charged at residential rates must not be increased without prior consultation with the ACCC and it being satisfied that Telstra has complied with the requirement in clause 22 of the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997* to have in place a low-income package. This Declaration includes a requirement that Telstra consult with the Low-Income Measures Assessment Committee (LIMAC) if it makes changes to the low-income package.¹
- Telstra must notify the Minister in advance if it intends to alter charges for directory assistance services, with the Minister able to disallow the proposed changes if they are considered not to be in the public interest.
- Telstra must offer a line rental service to schools at a price at or below the standard line rental offered to residential customers.

¹ LIMAC comprises representatives of welfare organisations agreed to by the minister and is responsible for reporting annually to the minister on the effectiveness of the low-income package and its marketing by Telstra, and assessing proposed changes to the package or Telstra's marketing plan for the package.

3 Objectives of price control arrangements

This chapter considers the objectives of the control arrangements.

3.1 Objectives of current arrangements

Price control arrangements have been aimed at promoting efficient pricing outcomes in telecommunications markets as well as achieving certain social policy/equity objectives.

The stated objectives of the current price control arrangements are to:

- a) promote efficiency in markets not yet effectively competitive and pass on the benefits to consumers
- b) protect low-income consumers from any adverse effects of line rental increases
- c) ensure rural and remote customers share in benefits from greater competition
- d) allow Telstra to gradually rebalance² line rentals
- e) meet other equity objectives.³

Efficiency objectives

The first major objective of price control arrangements is to promote efficient pricing outcomes. The ACCC has previously identified three major types of efficiency that it believes are relevant to the pricing of telecommunications services:

- *productive efficiency*—the ability of firms to produce given quantities of services at the lowest possible cost
- *allocative efficiency*—the deployment of resources to those areas of the economy where they are valued most and therefore provide the greatest benefit to society
- *dynamic efficiency*—firms have appropriate incentives to invest, innovate, improve the range and quality of services, increase productivity and lower costs through time.

Price control arrangements of the CPI – X variety seek to achieve efficient pricing outcomes. The underlying principle of CPI – X price controls is that price changes should reflect changes in underlying unit costs. In the current context, ‘CPI’ represents

² Rebalancing refers to the process of increasing line rental prices towards their efficient cost with offsetting decreases in call prices.

³ Commonwealth of Australia, *Telstra Carrier Charges—Price Control Arrangements...—Regulation Impact Statement*, p. 4.

the change in the consumer price index while 'X' is a measure of the ability to reduce prices as a consequence of firm or service-specific productivity growth.

CPI – X price controls are designed to:

- limit the ability of Telstra to set prices above costs
- provide an incentive to seek cost efficiencies in order to meet its price control obligations
- allow Telstra to 'rebalance' its prices for greater efficiency.

To explain, a supplier that has market power may have an incentive to price above cost to extract excess profits. Such profit-maximising behaviour may be inefficient from a social welfare perspective as it could lead to higher prices for consumers and lower levels of output being consumed. CPI – X price controls can help prevent these efficiency losses by limiting the extent to which a firm with market power can price above cost.

Secondly, a supplier with market power may have less incentive to pursue cost efficiencies compared to firms operating in a highly competitive market. CPI – X price controls aim to provide an incentive to achieve cost efficiencies in order to meet, and perhaps even exceed, those required by regulation.

A third justification for having CPI – X price controls on baskets of telecommunications services is that they give firms the freedom to structure their prices in a way that efficiently recovers 'common' costs of production. That is, the production of a series of telecommunications services often involves a number of 'common costs', which are costs that cannot be attributed to a particular service and are therefore allocated across services.

Social policy/equity objectives

The second major objective of the price control arrangements has been the achievement of certain social policy/equity objectives. The government has been keen to ensure that consumers from different geographic areas and with different income levels are able to have access to affordable telecommunications services and share in the benefits arising from more competitive markets.

3.1.2 Views of interested parties

Some submissions noted that retail price controls should continue while market failure or Telstra's market power persists (e.g. ATUG, p. 2).

In its submission to the discussion paper, the WA Department of Industry and Resources (WA Government) identified three market failures that it claims have not yet been fully explored by policy makers:

- facilities-based competition is not the most efficient outcome in areas where the customer base is unable to support more than one facilities provider

- investment uncertainty, which is largely caused by the reality that telecommunications infrastructure is sunk and irreversible
- non-price competitive forces in the presence of asymmetric information with respect to the flow of relevant market information between parties.

The WA Government also stated that, in the absence of comprehensive policy reform to adequately address the above market failures, price controls on essential facility elements should be retained as an explicit second-best option (pp. 4-5).

Similarly AAPT considered that employing retail price controls represents a second-best approach to regulation (p. 2).

In submissions to the discussion paper, Optus and Telstra indicated that retail price regulation is not required where an effective wholesale access regime is in place. AAPT considered that if Parts XIB and XIC of the TPA are utilised properly then retail price controls would no longer be necessary to constrain the retail market power of Telstra or enhance efficiency (p. 2).

Achieving efficiency objectives

Submissions noted that price controls are intended to drive efficiency gains and protect consumers from monopoly pricing—that is, simulate the prices that arise in a competitive market (Telstra, p. 3; Optus, p. 3). Thus, price controls are only required where competition is deemed to be ineffective or where competitive outcomes are unlikely (Optus, p. 3).

However, Telstra considered the prime objective of the current controls appears to be facilitating rebalancing without unacceptable rate shock to consumers (p. 3).

Telstra considered that extensive and growing competition across price-controlled services, and further competitive pressures that it has identified, means that regulated price controls are not required to drive efficiency (as opposed to protecting vulnerable consumers). Telstra stated that competition concerns have been addressed through the existing wholesale access regulatory measures (p. 3).

Achieving social equity objectives

In submissions to the discussion paper, Telstra and the CCC were against the use of retail price controls to achieve social policy objectives, although Telstra was sceptical that these arrangements would be abolished or that government or industry subsidies would be introduced in order to achieve them. Optus' submission to the discussion paper considered that social equity objectives conflict with the long-term interests of end-users (p. 6).

Chime did not believe that price control arrangements are the appropriate way to address social equity objectives. Mr Steve Dalby, Chime Communications, stated in the Perth public meeting that a social budget is a more appropriate place for such endeavours. Chime noted that, if it is through the budget, then it is open to public scrutiny and debate.

Conversely, consumer groups generally found that the social equity objectives in the price control arrangements to be of great importance. For example, in its submission to the discussion paper, the Smith Family believed that the current style of price control can be effective in protecting the interests of consumers who are either financially disadvantaged or who live in areas that are impacted negatively by present service distribution patterns (p. 1).

While not generally opposed to achieving social equity objectives, a number of interested parties questioned whether price control arrangements are the most appropriate mechanism to achieve such objectives. AAPT stated that a more appropriately defined universal service obligation (USO) would be better at dealing with the type of equity considerations the price caps are presently targeted towards achieving (p. 1).

The Australian Consumers' Association submitted to the discussion paper that retail price regulation should be used to deliver social equity outcomes unless another delivery mechanism is available (p. 1).

In most public meetings, consumers raised the question of why only Telstra is obliged to provide packages to address social equity objectives—there was a general view that all telecommunications service providers should offer such packages.

3.1.3 Views of the ACCC

The ACCC recognises the dual objectives of price control arrangements. The objectives are to promote efficient pricing of telecommunications services and achieve certain social policy objectives.

The first broad objective relates to the promotion of efficient pricing of telecommunications services. Price control arrangements can be used to help move the prices of telecommunications services closer to those expected in competitive markets, thereby promoting efficiency in markets which are not effectively competitive.

Submissions including Optus, AAPT and Telstra, have argued either that retail price control regulation is no longer needed as a result of competition or workable competition, or that the strengthening of the access regime would remove the need for such regulation.

The ACCC considers that many retail telecommunications markets in Australia are not effectively competitive. This generally stems from a lack of competition in the wholesale markets where Telstra has ownership of the ubiquitous fixed-line local access network, which connects virtually every household in Australia, and from which it derives market power.

In these circumstances, retail price controls can assist in delivering the benefits of competition to consumers. Retail price controls aim to limit the extent to which a service can be priced above cost (including a normal return on investment), thereby promoting the long-term interests of end-users (LTIE). The ACCC notes that retail price controls are applied to telecommunications services in various overseas jurisdictions.

That said, price controls may inhibit competition, efficient investment and the long-term benefits of consumers. For instance, price caps that are too prescriptive may foreclose efficient competitors. Therefore, the ACCC considers that the arrangements should be structured so that the potential for these adverse outcomes is minimised. Furthermore, in markets experiencing significant changes, the risks and consequences that price control arrangements do not achieve efficiency objectives may be greater.

The second broad objective of retail price controls is to achieve certain social policy objectives. These are outlined in the legislation under which these price controls would be introduced, the *Telecommunications (Consumer Protection and Service Standards) Act 1999*. The objectives include:

- that socially-important telecommunications services are accessible to all Australians, are supplied as efficiently and economically as practicable and are of a quality sufficient to meet the needs of the Australian community
- the equitable distribution of productivity gains
- promotion of diverse and innovative telecommunications services
- to promote a telecommunications industry that is efficient, competitive and responsive to the needs of the Australian community.

There can, however, be tension between the broad objectives of price controls. In particular, the pursuit of certain social policy objectives may create inefficiencies. For example, policy may require that the prices of supplying telecommunications services to particular consumers do not reflect the underlying costs.

The ACCC understands the importance of affordable access to socially-important telecommunications services to support effective participation in Australian society. Therefore, in making its recommendations, the ACCC will balance potential efficiency losses against this in assessing measures to achieve wider social policy objectives.

The ACCC also recognises that retail price controls are one of a number of alternative or complementary regulatory mechanisms by which to deliver economic or wider social policy objectives.

4 State of competition in relevant markets

In conducting the inquiry, the ACCC is required to consider the current state of competition in each of the markets that it considers relevant. This is a key consideration in determining the nature of the price control arrangements that should apply to Telstra in future.

Current price control arrangements apply to line rental, local call, domestic long-distance, international long-distance, fixed-to-mobile and connection services. In this report, the ACCC has also considered the supply of mobile services and dial-up and broadband internet services.

The ACCC notes that its assessment on the state of competition is undertaken on a service by service basis, and this should not be taken as a definitive view of the boundaries of particular markets. The ACCC considers the markets in which the following services are provided are relevant for this review:

- local telecommunications services (i.e. line rental, local call services and connections)
- domestic long-distance call services
- international long-distance call services
- fixed-to-mobile (FTM) call services
- mobile call services
- dial-up and broadband internet services.

This chapter briefly presents the factors that the ACCC has considered in this report to measure the effectiveness of competition. These factors are then applied to each of the relevant markets in turn to determine the effectiveness of competition within them.

4.1 Measures of effective competition

Judgements about effective competition in markets will often involve consideration of factors such as the number of firms, their market shares, price behaviour, the presence of natural monopoly characteristics, the height of barriers to entry, and the presence of vertical and horizontal integration.

Optus notes that it is important that regulatory bodies use the appropriate competitive benchmark to formulate market interventions. For this inquiry, Optus submitted that the ACCC should not consider ‘effective competition’ as how closely a market reflects ‘perfect competition’, and should instead focus on whether the market is ‘workably competitive’. According to Optus, a market that is workably competitive may be one in which monopoly rent is earned by a party with sustainable market power, but in which contestability drives efficiencies (pp. 4–5).

Optus outlined firm and consumer related characteristics to determine whether workable competition exists in a market (pp. 4–8). Where workable competition exists, Optus believes that the rationale for price control is removed.

Telecommunications markets are never likely to display textbook perfect competition characteristics. While imperfection is easy to find, it is difficult to establish what degree of imperfection constitutes effective competition. A degree of judgement is still required to reach conclusions on the level of competition in the market.

Consistent with the draft report, the ACCC will maintain the same threshold for determining the effectiveness of competition. The ACCC’s analysis of competition in the relevant markets generally focuses on the number of firms, market share, the extent of vertical and horizontal integration, barriers to entry and price movements.

4.2 Local telecommunications services

Telstra charges retail customers for the initial connection to the network, a continuing line rental charge (which differs for business and residential customers) and for local calls. Telstra also sells wholesale local telecommunications services to service providers and other carriers. Line rental and local calls can therefore alternatively be purchased from resellers.

4.2.1 Views of interested parties

The market in which local telecommunication services are provided was overall considered to be the market where competition was the least effective. For example, in its submission to the discussion paper the Australian Consumers’ Association stated that ‘in our estimation the restraining hand of competition has a particularly faint influence in the local call market’ (p. 2).

Interested parties were generally of the view that the residential markets for local telecommunications services are not competitive. For example, Mr Carter stated that competition for line rental is ‘non-existent’ and competition for local calls is ‘slightly above non-existent’ (p. 2). However, there was some support for the removal of business customers from the price control arrangements as competition was stronger for those customers. For example, Optus indicated in its submission to the discussion paper that competition already constrains line rental pricing to around cost in the business market (p. 9). Alternatively, Mr Matt Healy from Macquarie Corporate Telecommunications noted in the Melbourne public meeting that, ‘... it would be overstating it that business customers are now fully contestable with the markets effectively competitive’.

Optus contended that market share statistics and pricing outcomes indicate that the degree of concentration in the relevant telephony markets has decreased significantly over the past five years. Optus noted that there are six major carriers and CSPs selling basic access in the residential and business markets, due to development of the access regime for local call resale and the unbundled local loop service (p. 5).

Many participants, particularly those attending public meetings, argued that the current price of line rental is too high. In its submission to the discussion paper, the Australian

Consumers' Association considered that 'the line rental cost is one asserted by a provider with significant if not monopoly power' (p. 3). However, in the Canberra public meeting, TransACT indicated that increasing line rental prices, to more closely reflect costs, assisted in the competitive environment for facilities-based competition.

Facilities-based competition was further discussed in submissions to the discussion paper. Optus considered that emerging competitive infrastructure will prevent Telstra from monopoly pricing the local loop (p. 9). Optus pointed to the ACCC's *Telecommunications Infrastructure in Australia 2002* report to show that some facilities-based competition exists in local access markets (pp. 18-19). Optus also noted that competition appears to be greatest where facilities-based entry in the local loop has occurred successfully (p. 8). Telstra noted that 'major investment in satellite broadband infrastructure means that infrastructure-based competition and competition in the customer access markets is not limited to CBDs and metropolitan areas' (p. 7).

Conversely, the Australian Consumers' Association's submission to the discussion paper asserted that 'the notion of facilities based competition in anything but CBD and inter-CBD services has been shown to be a joke' (p. 2). Optus' submission to the discussion paper also noted that competition in line rental and local calls is weakest in rural areas (p. 9) and that additional facilities-based competition has been constrained by capital market aversion (p. 19).

Telstra also argued that the growing substitutability of mobile for fixed telephony will add to the competitive pressures currently operating in the markets for PSTN services. In particular, Telstra indicated that the number of fixed calls per SIO is declining per annum, while the number of mobile-only households is increasing (p. 3)

In addition to fixed to mobile substitution, Telstra also argued that the ACCC overlooked other key drivers of widespread competition: the potential for the use of ULLS by Telstra's competitors and the potential for take-up of VoIP (p. 3). Other submissions also supported the notion that rapid growth of VoIP would pose a significant challenge to the continued popularity of the fixed line service in coming years.

4.2.2 Views of the ACCC

The ACCC continues to believe that the overall market for local telecommunications services (which includes line rental, local call services and connections) is not effectively competitive.

While a limited degree of competition, particularly at the retail level, has emerged in local telecommunication services since deregulation, Telstra remains dominant in most aspects due to its ownership of the only ubiquitous fixed-line local access network in Australia—the customer access network (CAN).

That said, a reasonable level of facilities-based competition has emerged in the CBD areas of some capital cities. Evidence of the increased availability of alternative facilities and lower-level regulated access services such as the unconditioned local loop service (ULLS) and local PSTN originating and terminating services led the ACCC to remove access regulation of Telstra's local carriage service (LCS) for CBD areas.

However, there is considerably less facilities-based competition in other metropolitan areas and very little in many rural and regional areas.

Telstra has a high market share in the local telecommunications market, although this has declined slightly over the price control period. Telstra has estimated a slight decrease in its own market share for basic access services from 81 per cent in 2002, 78 per cent in 2003 to 75 per cent in 2004. Telstra has also estimated a slight decrease in its market share for local calls from 79 per cent in 2002, 76 per cent in 2003 to 74 per cent in 2004.⁴

Customers can choose from a number of alternatives when selecting a supplier of retail local telecommunications services, including Optus, AAPT, Primus, TransACT and PowerTel. However, most customers are still supplied on the Telstra network. In 2004, Telstra estimated that 91 per cent of basic access lines and 92 per cent of local calls are supplied either by Telstra's own retail arm or by resale of its services.⁵

Regulation, consumer inertia and Telstra's incumbency may explain the continuing high market share of Telstra. Given the access price for the LCS, competitors may incur losses on the resale of line rental and local calls, although these are typically recovered from also supplying long-distance and FTM services. Secondly, it is generally accepted that consumers display a 'status quo bias', preferring not to change consumption patterns unless there is a compelling reason to do so. This favours Telstra as the default provider of local telecommunications services and requires competitors to offer significant inducement, through lower prices, to overcome the bias.

The ACCC's *Changes in prices paid for telecommunications services* report indicates that there were real increases of 15.2 per cent, 13.2 per cent and 12.4 per cent in the average real price paid for basic access services in 2000-01, 2001-02 and 2002-03.⁶ Information available to the ACCC indicates that this trend in basic access prices continued in 2003-04. The price increases in basic access differed across consumer groups in 2002-03. The average price paid by residential consumers increased by 16.6 per cent, compared to 7.5 per cent for small business and 0.6 per cent for other business.⁷ Overall, between 1997-98 and 2002-03, average retail prices paid for basic access increased in real terms by 59.6 per cent.

Counter-balancing the increase in line rental prices to an extent is the decline in average retail local call prices. Between 1997-98 and 2002-03, average retail local calls prices dropped in real terms by 37.1 per cent. However, the ACCC notes that the rate of price decreases for local calls appears to have slowed substantially recently. The average retail price paid for local call services decreased by 3.8 per cent in 2002-03, compared

⁴ Telstra, *Annual Review 2002*, September 2002, p. 10; Telstra, *2003 Annual Review*, September 2003, p. 11; Telstra, *2004 Annual Review*, September 2004, p. 9.

⁵ Telstra, *2004 Annual Review*, September 2004, p. 9.

⁶ ACCC, *Changes in price paid for telecommunications services in Australia 1997-98 to 2002-03*, May 2004, p. 103.

⁷ *ibid*, pp. 79, 88, 93.

to price decreases of 11.7 per cent and 17.9 per cent in the previous two years.⁸ Information available to the ACCC indicates that the decrease was smaller again in 2003-04. Larger decreases have been enjoyed by the 'other business' group, which in 2002-03 experienced a price decrease of 10.7 per cent, compared to 3.7 per cent for small business and 1.2 per cent for residential consumers.⁹

The ACCC notes that Telstra's defined corporate, small corporate and small and medium enterprises (SMEs) obtain significant discounts off standard prices when local calls are acquired with other services on an individual contract. For recent offerings including local calls, small corporate customers have obtained an average discount of approximately [c-i-c] per cent off the standard price for all of the telecommunications services.¹⁰

The ACCC considers that the local telecommunications market is not effectively competitive for residential and small business consumers. However, the significant discounts that corporate customers can receive for acquiring local telecommunications services combined with the facilities-based competition in some CBD areas may indicate that greater competitive constraints exist for the provision of services to larger business customers.

Fixed to mobile substitution

In response to Telstra's suggestion that mobile services may be acting as an effective constraint on fixed-services pricing, the ACCC has previously noted that the growth in traditional 'voice' revenues¹¹ has levelled due to falling retail prices and customer migration to mobile and high-speed data services. The improved functionality, portability and coverage of mobile phones, and their resultant increase in popularity, may lead to consumers moving more calls and minutes from their fixed to their mobile phones. The ACCC estimates that approximately 20 per cent of total call minutes in Australia are mobile call minutes.¹²

If consumers move calls and minutes from fixed services to mobile services, and calls increasingly operate entirely on mobile networks, Telstra's revenues from fixed services and termination may become threatened. This suggestion was supported by a report from Citigroup, which stated:

⁸ *ibid*, p.105.

⁹ *ibid*, pp. 79, 88, 93.

¹⁰ The ACCC receives summary information from Telstra under the tariff filing provisions in Part XIB of the TPA that details any individualised, or non-standard, offerings entered in to by Telstra. The ACCC has aggregated the data for the months of April, May, June and July 2004.

¹¹ For example, revenues from local call, domestic and international long-distance, and fixed-to-mobile call services.

¹² Estimated using data from ACCC, *Telecommunications Market Indicator Report 2002-03*, June 2004.

Empirical evidence suggests the Australian market is at the cusp of wholesale migration of voice traffic to mobile services. Fixed voice revenues in Australia could fall by \$1.9 billion (27 per cent) in three years, whereas outgoing mobile voice revenues in Australia is forecast to grow by \$2.1 billion to \$8.6 billion. Our top-down fixed-to-mobile substitution analysis shows that Telstra faces a \$849 million revenue deficit by 2006-07.¹³

The introduction of aggressively priced mobile call plans, where the maximum customer spend per month is capped, can provide cheaper call rates for some consumers. Citigroup considered that these ‘bucket plans’ will reduce the cost differential between calls from mobile and fixed services, referred to as the ‘mobility premium’. According to Citigroup, the decrease of the mobility premium in the United States resulted in mobile voice revenue dramatically increasing as a percentage of fixed and mobile voice revenues. Citigroup predicts:¹⁴

Mobility premium is set to decline in Australia. Fixed to mobile substitution is set to accelerate.

The ‘fixed-to-mobile substitution’ argument would also suggest that consumers are abandoning fixed lines in favour of mobile services. Increasing line rental charges may encourage the cancelling of fixed-line services, particularly among low-income consumers. While Telstra has reported decreasing retail access lines supplied, this may be partly explained by customers handing-back second lines (e.g. fax or dedicated internet lines) or business customers substituting from PSTN to ISDN services. As Telstra has previously noted:¹⁵

The number of basic access lines has decreased in recent years but this has been offset, to some extent, by our success in encouraging customers to adopt alternative access services that have more capabilities, such as ISDN services and new internet access products using ADSL technology.

Further, the ACCC considers it unlikely that consumers in Australia or other nations with an extensive copper network are completely abandoning fixed-line services or will do so in the foreseeable future.¹⁶ This is because many consumers still depend on the home phone for everyday use, especially for cheaper calls and connection to the internet.

The ACCC notes that the argument that fixed-line telephony services are being constrained by potential substitution to mobile services implies a market where mobile services are considered substitutable for fixed-line telephony services. Generally, the higher price and lower quality of calls from mobile services compared with fixed-line

¹³ M. Sainsbury, ‘Telstra price hike likely as people go mobile’, *The Australian*, 13 October 2004, p. 37, citing a report from Citigroup, *Telstra Corporation Limited—It’s beginning to look a lot like Xmas*, 11 October 2004.

¹⁴ Citigroup, *Hutchison Telecomm Ltd—Shake, rattle and roll from “3”*, 17 November 2004, p. 6.

¹⁵ Telstra, *Annual Report 2003*, September 2003, p. 19.

¹⁶ An estimated 6 per cent of households in the United States have only a wireless (mobile) phone. Refer FCC, *Telephone subscribership in the United States*, October 2004, fn. 2 on p. 2.

services would indicate fixed and mobile services are in separate markets.¹⁷ At this point in time, the ACCC considers that mobile services do not act as a constraint on the pricing of fixed-line services.

In relation to constraints provided by other technologies, information presented by Telstra indicates that it has experienced negligible loss of demand to VoIP.¹⁸ Also, recent imputation tests on the ULLS core service suggested that the ULLS market is one where entrants will choose to enter only low-cost areas and target customers that generate above average revenues.¹⁹ At this point in time, the ACCC does not consider that technologies such as VoIP create a constraint on the pricing of local telecommunications services. Internet Telephony is discussed in more detail in chapter 8 of this report.

4.3 Domestic and international long-distance call services

Domestic long-distance calls are produced using long-distance and local networks (using domestic PSTN originating and terminating access services). International calls are produced using terminating services in the destination country, international transmission components, the long-distance network and local networks.

4.3.1 Views of interested parties

Many interested parties continued to express the view that competition in markets for domestic and international long-distance calls is strong or effectively competitive (e.g. CCC, p. 2; CTN, p. 2; Hutchison, p. 2). However, CTN warned that there is no guarantee that national long-distance calls will remain competitively priced (p. 2). Optus submitted that the markets are 'workably competitive' and noted that there are now around ten carriers and carriage service providers (CSPs) at the retail level and that the degree of concentration has decreased significantly over the past five years (pp. 4–5).

¹⁷ The ACCC has not considered fixed and mobile services to be in the same market in various decisions: *Mobile Terminating Access Service—Final Report*, June 2004; *Pricing Methodology for the GSM Termination Service*, July 2001; *Competition for Long-Distance Mobile Telecommunications Services*, January 2000; *Local Telecommunications Services*, July 1999.

Similarly, Ofcom concluded that fixed and mobile services are insufficiently close substitutes to fall within the same market definition in its 2003 markets review. Ofcom recently reaffirmed this view in its consultation document (Ofcom, *Strategic review of telecommunications—Phase 2 consultation document*, November 2004, Policy Annexes (F–L), p. 35).

¹⁸ Refer presentation to analysts by Mr Ted Pretty, Telstra, *Future Network Evolution And Product Strategy*, 22 July 2004, slide 41, which indicates the Australian market penetration of Voice over IP for 'enterprise' customers at less than 5 per cent, for 'SME's at less than 1 per cent and 'consumer' at less than 0.1 per cent.

¹⁹ ACCC, *Imputation Testing Report Relating to the Accounting Separation of Telstra for the September Quarter 2004*, December 2004, p. 20.

Optus contended that barriers to entry must be low as there are relatively low capital costs involved in entering the long-distance services market (p. 6). Additionally, Optus argued that the strengthening of the access regime, through initiatives such as model price and non-price terms and conditions for core services and the commitment to remove the access deficit contribution, has removed a significant barrier to competition in the long-distance market (p. 6).

4.3.2 Views of the ACCC

The ACCC has previously determined that the markets for domestic long-distance and international long-distance calls are not effectively competitive.

It is important to note that the markets for domestic and international long-distance call services display substantial margins. The ACCC's September 2004 *Accounting Separation* report²⁰ showed that the imputed margin²¹ for domestic long distance was 66 per cent for residential and 69 per cent for business customers. For international call services, the imputed margin was 41 per cent for residential and 48 per cent for business customers.²² These margins had generally increased from previous quarters.

One possible reason for these margins is that Telstra retains commanding shares in these services (at both the wholesale and, to a lesser extent, retail level). While competitors other than Telstra have gained some ground in the retail supply of both domestic and international long-distance calls over recent years, the market appears to have steadied. Telstra's own retail market share estimates show that it had 70 per cent of the domestic long-distance market (in minutes) in 2002, 66 per cent in 2003 and 65 per cent in 2004. Telstra's market share estimates indicate that it had 51 per cent, 53 per cent and 52 per cent of the international long-distance market in 2002, 2003 and 2004 respectively.²³

Telstra's market shares arise largely because of its ownership of the only ubiquitous fixed-network and the fact that many consumers purchase these services in a bundle with local call services. Most of Telstra's competitors continue to rely on access to its network if they want to supply these services, including supply as a bundle.

Both domestic and international long-distance call services require a number of fixed-line inputs, including 'transmission capacity' as well as PSTN 'origination' and 'termination' (PSTN O/T) services. While competitors have access to intercapital

²⁰ ACCC, *Imputation Testing Report Relating To Accounting Separation of Telstra for the September Quarter 2004*, December 2004.

²¹ In this context, 'imputed margin' means the difference between Telstra's average retail prices and the access prices plus retail and other costs faced by access seekers in providing the same services.

²² Over a bundle of services comprising line rental, local calls, domestic long distance calls, fixed to mobile calls and international calls, the imputed margin was 9 per cent for residential and 3 per cent for business customers.

²³ Estimates as at 30 June. Refer Telstra, *Annual Review 2002*, September 2002, p. 10; Telstra, *Annual Review 2003*, September 2003, p. 11; Telstra, *2004 Annual Review*, September 2004, p. 9.

transmission services from a variety of carriers (e.g. Telstra, Optus, PowerTel, Nextgen) on competitive terms,²⁴ they are generally limited to acquiring PSTN O/T from Telstra.

The ACCC's publishing of model price and non-price terms and conditions for core services, including the PSTN, was intended to provide guidance to industry as to the ACCC's views on fair terms and conditions of access to such services. The model price for PSTN included a recommendation for the transitional removal of the 'access deficit contribution' which had significantly distorted competition. While the model price is not binding, it lessens the information asymmetry and associated risks for industry in a manner which may act to reduce barriers to entry to supply domestic and international long-distance services.

While there are various ways for competitors to compete in the supply of long-distance services, the majority of suppliers appear to have entered as full-service providers, offering a suite of telecommunications services. The high margins for the long-distance services are generally used to offset losses from the supply of local calls and line rental. That is, distortions in the local telecommunications market influence pricing decisions in the related long-distance markets. Full service providers also need to address the switching costs posed by 'status quo bias' to attain consumers.

The current regime offers other potential ways to compete in the long-distance markets as a result of pro-competitive measures that were introduced to try and offset Telstra's influence through its ownership of the ubiquitous fixed network:

- preselection allows a competitor, which does not necessarily provide local call services, to provide domestic and international long-distance and FTM calls
- override allows a competitor that is not pre-selected by a particular customer to supply long-distance and FTM services through use of 'override' codes
- calling cards allow competitors to supply calls by requiring the consumer to call a local number and then be connected overseas.

A 2004 ACA survey estimated that 8 per cent of households and 13 per cent of small businesses used one company for local calls and a different company to supply long-distance and FTM calls in 2004.²⁵ The benefits of preselection may be decreasing due to the increasing popularity of bundling—that is, where consumers acquire two or more services as a single package. Currently, bundled packages are usually structured to provide discounts when the consumer is pre-selected to the service provider who also

²⁴ The ACCC monitored prices on all 'intercapital' routes during 2002-03. The results of the monitoring program suggested that transmission prices on these routes have declined significantly since 2001. This suggested that competition is operating effectively in these markets. In addition, the ACCC noted in its recent final report in relation to the review of the transmission declaration that there appears to be effective competition on certain non-intercapital routes.

²⁵ ACA, *Consumer Satisfaction Survey 2004*, Special Report No. 14, August 2004, p. 30.

provides line rental and local calls.²⁶ Consumers, particularly residential consumers, may prefer the discounts offered on bundled packages rather than the benefits of preselection.

Override competition allows a consumer to preserve discounts from bundling local and long-distance services together from one provider, while purchasing long-distance services from an override competitor. However, override competitors may be of limited appeal to consumers given potential inconveniences and search costs involved.²⁷ This may be reflected in ACA survey estimates which indicate that while 64 per cent of households are aware of override codes, only 4 per cent of households have used them.²⁸

In terms of calling cards, the ACA considers that the increased availability of such cards may be a possible explanation for its reported decrease in international call minutes.²⁹ Paul Budde Communication estimated that revenues from 'remote stored value' cards, which include products such as Telstra's PhoneAway cards, are around \$150m per annum. Telstra had 30 per cent of that market in 2003.³⁰ However, calling card calls are often provided using VoIP technology and may, in many cases, be of lower quality than a standard fixed line. Also, the calling card may involve search costs for consumers and are not well suited to making unplanned or more sporadic calls. In general, it can be considered that calling cards, and override services, offer a niche competitive option.

Retail pricing trends for these services suggest a reasonable degree of competition in these markets, although the extent of price competition appears to have slowed in recent years. The retail prices paid for domestic long-distance calls decreased by 9.5 per cent, 6.3 per cent, 8.7 per cent and 4.7 per cent in 1999-00, 2000-01, 2001-02 and 2002-03 respectively.³¹ The ACCC understands that the price decrease in 2003-04 was significantly smaller than in previous years. The price changes varied across different consumer groups in 2002-03 with 'other business' enjoying larger average

²⁶ Packages such as Telstra Rewards and Optus' 'yes' Rewards, which offer discounts through bundling of services, are only available to consumers that acquire line rental, local calls and pre-selectable services from the service provider.

²⁷ For example, consumers may be deterred by finding out the call rates offered by override competitors compared to the pre-selected long-distance provider; dialling the four digit code prior to a phone call; or receiving telephone bills from more than one service provider.

²⁸ ACA, *Consumer Awareness and Information Needs Survey 2002*, Special Report No. 11, October 2002, p. 11; ACA, *Consumer Satisfaction Survey 2004*, Special Report No. 14, August 2004, p. 30.

²⁹ ACA, *Telecommunications Performance Report 2003-04*, November 2004, p. 60.

³⁰ Paul Budde Communication, *Australia—Calling Card Market in 2003*, 2004, pp. 7 and 4.

³¹ ACCC, *Changes in Prices Paid for Telecommunications Services in Australia 1997-98 to 2002-03*, May 2004, p. 106.

price decreases (9.1 per cent) compared to the increases experienced by small business (6.8 per cent) and residential consumers (2.4 per cent).³²

Similarly, there are indications that the extent of price competition for international long-distance calls has slowed. The average retail price paid decreased by an average of 27.0 per cent, 17.2 per cent, 15.3 per cent and 5.8 per cent in 1999-00, 2000-01, 2001-02 and 2002-03 respectively.³³ Information available to the ACCC for 2003-04 indicates a similar decrease to the 5.8 per cent decrease in 2002-03. Again, decreases in prices paid in 2002-03 were experienced more by 'other business' (15.7 per cent), than residential (3.5 per cent) and small business (7.2 per cent) consumers.³⁴

Slowing price decreases are not necessarily indicative of reducing competition. They may reflect that the market has reached a certain level of maturity. However, as noted above, prices for long-distance services remain well above cost. These factors combined may further suggest that override and calling card competitors are attracting only a niche proportion of consumers.

The ACCC noted above that long-distance margins are well above cost, and that imputed margins for the supply of these services to business consumers are greater than to residential consumers. The imputed business margins include all business consumers. It is likely that the margins for larger business customers are significantly less than those reported for the business consumers overall. Similarly, margins for smaller business customers would be higher. This is because Telstra has provided information to the ACCC that indicates that corporate, small corporate and SMEs obtain significant discounts off standard prices when domestic and international long-distance calls are acquired with other services on an individual contract. For recent offerings including long-distance calls, such customers have on average obtained a discount greater than [c-i-c] per cent off the standard price for all of the telecommunications services.³⁵

The ACCC considers that the markets for domestic and international long-distance call services are showing encouraging signs of competition. Preselection, override and calling card options appear to be offering some competition, although it may be to a niche market. Competition for full-service providers may be more limited as a result of distortions in the local telecommunications markets. In terms of the business segment, while significant discounts are available, higher imputed margins for business customers compared with residential customers make it unclear whether greater competitive constraints exist in the overall business segment.

³² *ibid*, pp. 79, 88, 93.

³³ *ibid*, p. 108

³⁴ *ibid*, pp. 79, 88, 93.

³⁵ The ACCC receives summary information from Telstra under the tariff filing provisions in Part XIB of the TPA that details any individualised, or non-standard, offerings that it has entered in to. The data has been aggregated by the ACCC for the months of April, May, June and July 2004.

4.4 Fixed-to-mobile call services

FTM call services are retail services provided using the wholesale PSTN origination service and the mobile termination service.

4.4.1 Views of interested parties

Many interested parties maintained that competitive forces in the market for fixed to mobile calls are weak (e.g. CCC, p. 2, Mr Carter, p. 2, Hutchison, p. 2). In its submission to the discussion paper, Hutchison stated that the low degree of competition for FTM services will continue to exist due to (pp. 2–3):

- Telstra’s continued dominance at the infrastructure level such that other suppliers of FTM calls are dependent upon their principal competitor for access to essential inputs
- a large part of the competition which does exist is dependent on the resale of FTM calls supplied by Telstra
- the existence of significant cross-subsidisation of selected services through bundling and specific targeting of corporate customers
- Telstra’s dominant share of all retail telecommunications markets
- Telstra’s significant degree of vertical and horizontal integration.

In the Sydney public meeting, Mr Brian Perkins, ATUG, stated:

Mobile termination is obviously not a highly competitive area. It is, in fact, a monopoly in each case and that has been well canvassed in the mobile termination determination by the Commission. And I think ... that fixed-to-mobile is also quite clearly not a highly competitive service either. In fact, with Telstra’s dominance in the local call area, and the local call access area, it really means that fixed-to-mobile is very much a Telstra determinant.

Optus considered that developments in the preselect calling market (consisting of domestic and international long-distance services and FTM) make this market ‘workably competitive’ (p. 4). Optus previously noted in its submission to the discussion paper that there are numerous carriers and providers competing for long distance services, including the FTM component (p. 31).

Hutchison stated that the lack of competitive forces in FTM pricing is particularly evident in relation to residential customers (p. 2). Hutchison noted in its submission to the discussion paper that it is of the view that separate markets exist for business and residential users (p. 4).

Virgin Mobile Australia queried the ACCC’s draft conclusion that FTM prices are above cost as a result of mobile termination costs given that price discrimination occurs. Virgin queried how the different FTM prices can be dependent on MTAS input costs, when the MTAS costs are the same irrespective of whether the service is being provided to a business or residential customer. On this basis, Virgin ‘believes that the evidence rather suggests that FTM prices are reflective of the uncompetitive fixed line market and the ability of fixed line operators to exploit their market privilege in the

residential area where end-users have less choice in relation to fixed line operators and less ability or willingness to negotiate their contracts with their provider' (p. 2).

4.4.2 Views of the ACCC

The ACCC addressed the state of competition in the market within which FTM calls are supplied in the *ACCC Telecommunications Reports 2002-03* report and *Mobile Services Review—Mobile Terminating Access Service Final Decision*. In both reports, the ACCC considered the market within which FTM calls are supplied remains far from being effectively competitive despite multiple suppliers at the retail level.

At the retail level, the ACCC understands that around ten carriers/carriage service providers supply FTM services. In the absence of clear market share figures, a proxy is required. In the *ACCC Telecommunications Reports 2002-03*, the ACCC used the information it collects under the regulatory accounting framework (RAF) and other sources to estimate market shares based on the number of fixed minutes that are terminated on mobile networks.³⁶ The data indicated that Telstra accounts for around 65 per cent of all fixed minutes terminated. As an alternative proxy, market share figures for domestic long-distance calls can be used since the pre-selection determination requires this and FTM call services (as well as international long-distance call services) to be taken as part of a bundle.³⁷

There appears to be a significant degree of price discrimination in the price of FTM calls being offered to residential and business consumers. For example, data provided to the ACCC for the purpose of reporting on the changes in prices paid for telecommunications services shows that in 2002-03 the average price paid by residential consumers of FTM calls was around 27 per cent higher than the average price paid by business consumers (other than small business).

While the price trends for FTM services indicate that competitive forces in this market are relatively weak on the whole, the trends differ among customer groups. The average real price of FTM calls declined by 6.2, 3.2 and 2.4 per cent in 2000-01, 2001-02 and 2002-03 respectively.³⁸ In 2002-03, residential consumers experienced increases of 5 per cent in average real FTM prices, while small business and 'other business' consumers experienced decreases in the price of FTM services (4.2 and 10.9 per cent respectively).³⁹ The ACCC understands that overall FTM prices in 2003-04 decreased by a similar percentage to the 2.4 per cent decrease in 2002-03. However information available to the ACCC indicates that in 2003-04, both residential and small business

³⁶ For this purpose the RAF only covers the four largest fixed-line carriers—Telstra, Optus, AAPT and Primus.

³⁷ It is more instructive to look at long-distance call service market shares as opposed to international call service market shares as several carriers only supply international calls using override codes.

³⁸ ACCC, *Changes in Prices Paid for Telecommunications Services in Australia 1997-98 to 2002-03*, May 2004, pp. 109.

³⁹ *ibid*, pp. 79, 88, 93.

consumers experienced increases in the average real price of FTM calls while ‘other business’ consumers again experienced a large decrease in the price of FTM services.

As with local and long-distance calls, Telstra’s corporate, small corporate and SME customers obtained significant discounts off standard prices when fixed-to-mobile calls were acquired with other services on an individual contract. For offerings including fixed-to-mobile calls, the ACCC estimates that on average, such customers received a discount of over [c-i-c] per cent off the standard price for telecommunications services.⁴⁰

Price trends, in isolation, are not necessarily indicative of the effectiveness of competition in a market. That said, the ACCC has evidence to suggest that the average yield on FTM calls is well above cost, particularly for residential customers. For example, according to Telstra’s *2004 Annual Report*, its average yield on FTM calls was 37.8 cents per minute. Data available to the ACCC for its *ACCC Telecommunications Reports* indicates that the average yield received across Telstra, Optus, AAPT and Primus for residential FTM calls is in the order of 46.3 cents per minute. Based on a range of domestic and overseas information, the ACCC estimates that the underlying cost of the mobile termination service is significantly lower than this.

Further, the ACCC’s *Accounting Separation* imputation report for the September quarter 2004 revealed that the imputed margin that Telstra earned on FTM services was 17 per cent for business customers and 36 per cent for residential customers. The imputation report assumes the mobile termination charge that a competitor would incur if it terminated traffic on Telstra’s mobile network, i.e. off-net termination charge. This is substantially above on-net costs. Therefore, actual margins are likely to be much higher.

Prices of retail FTM services are significantly above cost which appears to be largely the result of mobile termination input costs, and more specifically the price of wholesale mobile termination services.⁴¹ In the *Mobile Services Review*, the ACCC estimated that the cost of providing the termination service, including a normal profit, lies within a range of 5 to 12 cents per minute. However, the lowest known price of the service available in the market at that time was 21 cents. The ACCC review recommended that mobile operators reduce the price of the terminating service towards cost by January 2007.

The ACCC considers that the market within which FTM services are supplied to residential consumers is far from effectively competitive. However, this is less clear for the supply of FTM services to business consumers.

⁴⁰ The ACCC receives summary information from Telstra under the tariff filing provisions in Part XIB of the TPA that details any individualised, or non-standard, offerings that it has entered in to. The data has been aggregated by the ACCC for the months of April, May, June and July 2004.

⁴¹ The other two key inputs are origination and transmission.

4.5 Mobile services

The provision of a retail mobile service consists of two elements: the mobile access (subscription) service including connection, a handset and monthly access; and outgoing call services.

SMS, pre-paid mobile services and CDMA services are also considered separately in this report.

4.5.1 Views of interested parties

Virgin considers that the mobile services market is effectively competitive (pp. 3–4). Optus and Vodafone expressed the same viewpoint in their submissions to the discussion paper (Vodafone, p. 3; Optus, p. 33–34).

Mr Paul Fletcher, Optus, noted in the Sydney public hearing that the markets for mobile services ‘is far and away the most competitive sector of the telecommunications industry’. Optus’ submission to the discussion paper argued that the intense level of competition was shown by the structure, conduct and performance of the industry:

- market structure is characterised by the existence of multiple market players competing not only for new customers, but also for churn from other networks
- conduct—driven by competition for new, and to retain, consumers as evidenced by carriers offering multiple tariff structures and pricing options; bundling becoming increasingly prevalent for product differentiation; pricing of mobile-to-mobile calls is subject to intense competition
- performance of the industry is consistent with competitive outcomes with modest industry-wide profitability (pp. 33-34).

Virgin stated that competition is providing value and innovative offers to the mobile services market, including that:

- consumers have a choice of networks and offers, across a range of monthly usage levels and service providers, with plans at different pricing levels and often including subsidised handsets
- consumers can easily switch between mobile providers while keeping their mobile number resulting in mobile operators competing for both new and existing mobile customers
- mobile providers have recently introduced a range of innovative and aggressive pricing plans, and the lowest price point for caps has significantly decreased from around \$100 to low less than \$50 (p. 4).

In its submission to the discussion paper, Vodafone noted that competition in the mobiles market has intensified during 2004. In addition to the factors outlined above, Vodafone pointed to the investment or planned investment in the development of 3G networks as an indicator of increasing competitiveness of the market (p. 4).

4.5.2 Views of the ACCC

The ACCC found in its *Mobile Services Review* report that although mobile services are exhibiting more encouraging signs of competition than the markets for fixed-line telecommunications services, the markets are unlikely to be effectively competitive as yet.⁴²

In that report, the ACCC noted that the supply of new services on 2.5G and 3G networks may drive further growth and have a competitive impact in the industry in the future. The ACCC also noted that the level of product differentiation in the market could indicate a relatively competitive market.

That said, the ACCC notes that the retail mobile services market is influenced by issues in the upstream markets for mobile terminating access services.

Additionally, the following factors suggested that the ACCC should be cautious in assessing the level of effective competition in the market for retail mobile services:

- the relatively high level of market concentration in favour of the four national mobile network carriers
- the high barriers to effective entry into the market (associated with national geographic coverage and sunk costs)
- the apparently high levels of profitability of mobile carriers (particularly those with large market shares)
- the relatively high penetration rate of mobile phones and decreasing (or stabilising) average-revenues-per-user.

On balance, the ACCC considered that the structural and behavioural measures of competition did not clearly indicate that the retail mobile services market was effectively competitive at that point in time.

4.6 Dial-up and broadband internet services

There are various technologies and services offered by Internet Service Providers (ISPs) to provide access to the internet. Access to the internet can be provided using a narrowband or broadband connection. Most dial-up services use narrowband connections. Broadband services offer a data rate greater than narrowband and usually do not tie up a telephone line for data, thereby allowing the consumer to make voice calls while accessing the Internet.

⁴² ACCC, *Mobile Services Review—Mobile Terminating Access Service Final Decision*, June 2004, p. 99.

4.6.1 Views of interested parties

In its submission to the discussion paper, Optus considered that the data market is particularly competitive. Optus also noted:

- more players are entering the broadband market and offering a range of broadband applications and innovative technologies
- examination of broadband uptake shows phenomenal growth in this data platform over the past several years
- the data market is particularly competitive, as shown by the retail market shares: estimates for 2003 indicate that Telstra has 31.9 per cent market share, while Optus has 11.8 per cent
- data services are likely to be the revenue drivers of tomorrow... this is forcing carriers to upgrade their network facilities to cope with the ever-increasing demand for capacity and download speeds, in addition to the peripheral services (pp. 15-17).

Some submissions and participants in public meetings raised concerns with internet pricing. For example, the Australian Consumers' Association submission to the discussion paper suggested that the retail prices may not reflect a fully competitive market, noting that 'recent contretemps with regard to wholesale pricing of broadband suggest that consumer pricing bears closer inspection' (p. 5). In the Cairns public meeting, participants noted that dial-up internet is currently at DSL prices. As a result, the participants considered that Telstra has no incentive to upgrade its technology.

Further, in many public meetings (particularly those in regional areas), participants noted that they usually had to rely on Telstra to obtain broadband services. Participants generally focused on the difficulties in getting Telstra to upgrade its exchanges to enable the provision of DSL services. In Dubbo, concern was also raised, and examples provided, of local jobs being lost as a result of technology not being upgraded.

That said, in Dubbo and Wagga Wagga, participants noted that the government's HiBIS and 'networking the nation' schemes were encouraging new competitive entry into regional areas. Mr John Clements, in Dubbo, considered that without the government schemes, competitive entry would be unlikely to occur.

Optus' submission to the discussion paper provided detail about a number of smaller carriers that have announced commitments to invest in local loop infrastructure to provide broadband services, including through wireless infrastructure (p. 20). Also, Telstra's submission to the discussion paper noted that there has been major investment in satellite broadband infrastructure which provide 100 per cent coverage across the Australian landscape and greater capability for advanced two-way broadband services (p. 7).

Some submissions and participants at public meetings considered that Telstra has attempted to stifle the development of competition for broadband services. For example, Optus' submission to the discussion paper noted that broadband growth has occurred despite Telstra managing to delay broadband supply in Australia (p. 15). In

the public meeting in Perth, Chime considered that Telstra has manipulated the wholesale market for broadband by:

- maintaining monopoly prices for declared services such as the unconditioned local loop service (ULLS) and line sharing service (LSS) and refusing to negotiate, and adding on related charges for connection/disconnection at inflated prices such that competitive alternatives can not be deployed for the mass market
- as competitors resell ADSL, engaging in price squeezing by pricing wholesale products above retail products by:
 - requiring wholesale customers to purchase other products that could be sourced at competitive prices in the open market
 - introducing charges for wholesale customers that are not applied to its retail arm
 - limiting the ability of other firms to add value or differentiate the product
- making dial-up products unattractive to encourage migration to broadband products, where the above strategies are deployed
- discouraging wholesale customers from raising their concerns publicly or with regulators.

4.6.2 Views of the ACCC

Internet services are supplied to a wide range of consumers including large corporate businesses, small to medium enterprises and residential consumers. These include narrowband dial-up internet services supplied over the fixed-line network (primarily used by residential consumers and small businesses) as well as high-speed internet services commonly referred to as ‘broadband’ which can be supplied using xDSL, hybrid fibre coaxial (HFC) cable, microwave or satellite technology.

The number of ISPs supplying internet access has increased over the price control period. The Australian Bureau of Statistics (ABS) estimated that there were 694 ISPs supplying Internet access at the end of the March quarter 2004, increasing from 563 ISPs at the end of the September quarter 2002.⁴³ However, the ABS reports that the number of dial-up subscribers appears to be decreasing, with a fall of 163,000 subscribers from the end of the September quarter 2003 to the end of the March quarter 2004.⁴⁴ This appears to reflect a movement by consumers from dial-up to broadband services.

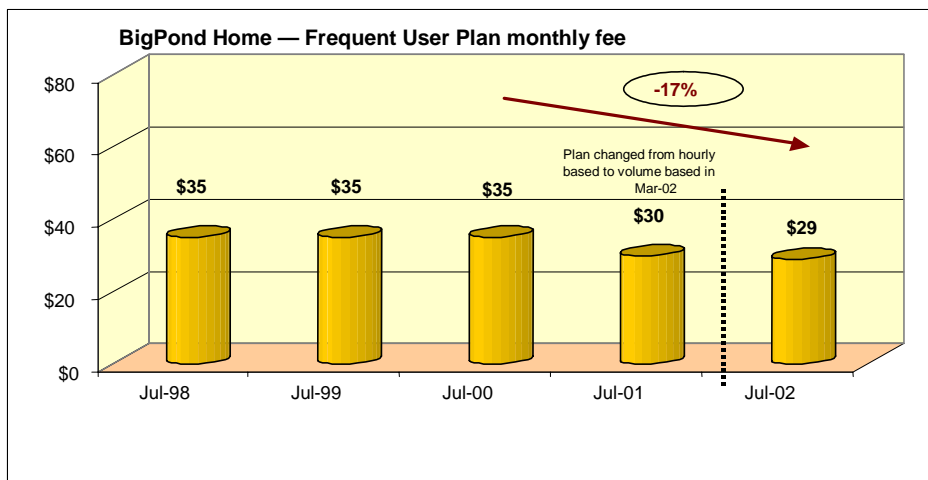
⁴³ A large number of suppliers is not necessarily indicative of an effectively competitive market—for instance, one supplier may still hold a dominant position in the market.

⁴⁴ Australian Bureau of Statistics, *8153.0 Internet Activity, Australia*, <www.abs.gov.au>, 23 July 2004.

Telstra’s own estimates indicate that its share of the narrowband internet market has remained relatively stable over the price control period. Telstra estimates that it had 26 per cent of the narrowband internet market in 2002, 27 per cent in 2003 and 26 per cent in 2004.

There is limited information about price trends in narrowband internet services over the market. The ACCC notes, however, that BigPond prices decreased by about 17 per cent over the period July 1998 to July 2002. This is shown in Figure 4.1 below. In 2003–04, the ACA stated that the price of a dial-up Internet connection appears to have stabilised at between \$25 and \$30 per month.⁴⁵

Figure 4.1 Changes in BigPond prices July 1998 to July 2002⁴⁶



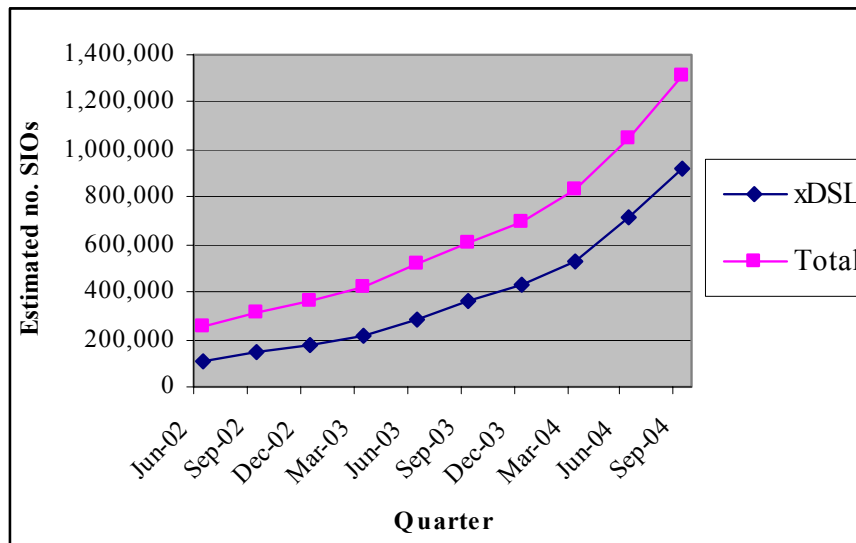
There has been significant growth in the number of broadband connections in the market over the price control period. At 30 June 2002, the estimated number of broadband services-in-operation was 258 100, however by 30 September 2004, this figure had grown to 1 310 300. This is shown in Figure 4.2 below. Much of the growth has been in xDSL services, with the estimated number of services in operation increasing from 108 100 at 30 June 2002 to 921 400 at 30 September 2004.⁴⁷

⁴⁵ ACA, *Telecommunications Performance Report 2003–04*, November 2004, p. 87.

⁴⁶ Regional telecommunications inquiry (D. Estens, chairman), *Connecting Regional Australia*, November 2002, p. 124.

⁴⁷ The ACCC collects quarterly data on the number of broadband connections from the major carriers of broadband services. The data is periodically published by the ACCC in its *Snapshot of Broadband Deployment* series. Refer ACCC, *Snapshot of Broadband Deployment as at 30 September 2004*, <www.accc.gov.au>.

Figure 4.2 Growth in broadband services⁴⁸



Despite the significant growth in broadband subscribers, Australia's rate of broadband take-up is behind other developed countries. The penetration rate in Australia was 3.5 subscribers per 100 inhabitants in December 2003, compared with the OECD average of 7.3. This left Australia ranked 20th out of the 30 OECD countries, compared to 18th in June 2002.⁴⁹

Telstra's own estimates indicate that it has lost market share in broadband internet services over the price control period. Telstra estimates that it had 62 per cent of the market in 2002, 50 per cent in 2003 and 42 per cent in 2004.⁵⁰

Broadband prices have noticeably decreased in recent times, however differences in speeds and download limits makes them difficult to compare. Telstra introduced new broadband pricing plans on 27 February 2004 under the headline 'BigPond broadband at dial-up prices'.⁵¹ The new pricing decreased Telstra's entry-level price for broadband services from \$39.95 (256k, 0MB included downloads) to \$29.95 (256k, 200MB included downloads). Other companies, including Primus, have since introduced entry-level broadband plans at \$19.95 (256k, 200MB included downloads).

However, on 19 March 2004 the ACCC issued a Part A Competition Notice to Telstra relating to the pricing of its broadband internet services. The notice, issued under subsection 151AKA(2) of the Act, came in to force on 20 March 2004. The ACCC issued the notice because it believes that Telstra has engaged, or is engaging, in at least

⁴⁸ Data sourced from: ACCC, *Snapshot of broadband deployment as at 30 September 2004*, <www.accc.gov.au>.

⁴⁹ ACA, *Telecommunications Performance Report 2003–04*, November 2004, pp. 84–85.

⁵⁰ Telstra, *Annual Review 2002*, September 2002, p. 10; Telstra, *Annual Review 2003*, September 2003, p. 11; Telstra, *2004 Annual Review*, September 2004, p. 9.

⁵¹ Telstra, *BigPond Broadband at Dial-Up prices*, media release, 15 February 2004.

one instance of anti-competitive conduct relating to its wholesale pricing of high speed internet services in light of its retail offerings. At 31 January 2005, the competition notice remained in force.

The number of competitors providing broadband services is quite high in the CBD areas of many capital cities, reflecting the concentration of a large number of consumers and the demand characteristics of those customers (generally high-volume business customers). Competitors use a variety of alternative infrastructure to provide broadband services in CBD areas.

The number of competitors vying to provide services to customers in metropolitan and regional areas is lower than in CBD areas, as metropolitan and regional consumers are more likely to be residential. Given the different demand characteristics and economies of density in these regions, there are less broadband services providers that use their own infrastructure. Some broadband entry into regional areas has occurred, often by local council initiative.

The ACCC has undertaken a number of initiatives to promote broadband competition and take-up, including the declaration of the ULLS in 1999 and the LSS in 2002. It was considered that the declaration of these services would encourage efficient infrastructure-based competition in the provision of xDSL services. To date, however, the ACCC considers that the take-up of these services continues to be slow. For retail competition the preference of both carriers and carriage service providers remains wholesale ADSL services.

The markets in which dial-up and broadband services are supplied are currently undergoing change. While there are encouraging signs of competition in the supply of dial-up internet services, competition may be impacted by distortions arising from upstream arrangements (the internet interconnection service) and from consumer movement to broadband services. In relation to broadband services, the ACCC considers that it may be premature to form a view as to whether competition in the market is effective. Having said that, the ACCC remains concerned that Telstra has acted, and may continue to have the incentive to act, in a manner that may hamper the further development of competition in the market in which broadband services are provided.

5 Possible future price control arrangements

Chapter 3 noted that the ACCC considers that price control arrangements should only be used in certain circumstances to achieve either economic objectives or broader social policy objectives. This chapter considers the telecommunications services to which future price control arrangements should apply and the nature of those arrangements.

Price control arrangements can be in the form of price caps applying to baskets of services, consisting of either a single service or a number of services, or take other forms. This chapter first considers price caps and then considers other possible arrangements. Targeted price control arrangements for low-income consumers are discussed separately in chapter 9.

Price control arrangements should be reviewed periodically given market and industry developments could occur that open non-contestable markets to effective competition or discourage competition. Similarly, community expectations and behaviour may change such that access to particular telecommunication services becomes more, or less, essential to support effective participation in Australian society. Therefore, this chapter considers the duration for the price controls.

This chapter also considers whether any complementary arrangements are required to work in conjunction with the future price controls, and if so, their nature. Finally, this chapter considers mechanisms that are specified for assessing and enforcing compliance, which are important to ensuring that the benefits envisaged by the price control arrangements are realised.

5.1 Price cap baskets

5.1.1 Line rental

Line rental services are currently in a stand-alone basket and subject to a cap of CPI + 4.0 per cent.

In the draft report, the ACCC recommended that for future price control arrangements, line rental services should be included in a broad basket containing local calls, domestic and international long-distance call services and FTM calls.

The ACCC also recommended a cap on local access services. Two possible methodologies for the cap were outlined:

- a CPI – X cap on line rental, or
- a cap restricting the prices on the HomeLine Part and BusinessLine Part (the basic telecommunications service consisting of line rental and local calls only).

Most submissions and participants at public meetings supported the inclusion of line rental in the retail price control arrangements. There was, however, limited support for

the removal of price controls from line rental. Mr Andrew Sheridan, Optus, noted in the Sydney public meeting:

We have argued and have put forward evidence to support that it is now the time that we should be considering relaxing controls on line rental. However, I think it is important that we do build in some additional safety mechanism ... one of the options that we have put forward is to set some controls at the wholesale level.

Telstra considers that retail price controls are largely redundant, but stated that if such controls are to be applied then it supports a broad cap to allow pricing flexibility (pp. 3–5). Mr Carter argued in his submission that a broad price cap is incorrectly formulated because it mixes completely uncompetitive markets (line rental, local calls and FTM) with competitive markets (domestic and international long-distance). Mr Carter also considered that line rental and local call costs will not decrease under a broad based cap (pp. 1–2).

While Telstra did not support alternatives to the broad based cap that restrict its pricing flexibility, many submissions supported a specific cap on line rental (e.g. AAPT, p. 4; CCC, p. 2). The Australian Consumers' Association supported a specific cap as it was concerned at reports of consumers foregoing a fixed line phone in favour of pre-paid mobiles because of increasing line rental costs (p. 1).

The CCC considered that it is appropriate that line rental charges become subject to a specific sub-cap with a CPI – X formula. The CCC stated that there is a risk that Telstra will use the basic access charge to cross subsidise call charges if this initiative is not implemented (p. 2).

AAPT favoured a cap on HomeLine Part and BusinessLine Part prices to restrict further increases in line rental charges. AAPT considered that a CPI – X cap may allow Telstra to attribute bundling discounts to the service and still satisfy the cap, thereby effectively providing Telstra with a regulator-mandated price squeeze (pp. 4–6). Optus considered that the controls on HomeLine Part should be in substitution for, not in addition to, the broad-based cap. If the targeted measure is simply overlaid on a broad-based cap, Optus stated that it becomes a heavy-handed regulatory measure (p. 14).

CTN expressed concern that applying price controls to the most basic local access products (i.e. HomeLine Part and BusinessLine Part) protects some, but not necessarily the most vulnerable, consumers (p. 2).

While parties including TransACT and Optus supported the recovery of appropriate returns on Telstra's access infrastructure, some submissions expressed the view that the process of rebalancing is complete (AAPT, p. 3; CCC, p. 2). In light of this, it was argued that there should be no further provision for increases in the real price of line rental.

In response to a question at the Sydney public meeting, Mr Bill Scales, Telstra, outlined the following reasons why line rental prices were unlikely to increase even if they were not subject to a service specific price-cap:

- if Telstra increased line rental beyond a reasonable amount, it would lose customers to wholesale customers

- Telstra considers that it is getting to the point where competition is taking over from regulation as a constraint on prices
- current uncertainty in the market as to whether substitution to mobiles will occur dampens incentives to increase line rental prices.

In its submission to the discussion paper, Optus believed that emerging competition in the local loop would prevent Telstra from monopoly pricing in at least some market segments, citing the business market as an example (pp. 9-10). However, in public meetings in Wagga Wagga and Dubbo, it was noted that regional and rural customers do not generally have alternatives to line rental that are becoming available to customers in metropolitan areas.

5.1.2 Local calls

Local calls are currently a component service within a basket of services which also includes domestic and international long-distance calls, and fixed-to-mobile calls ('the basket of call services'). The basket is subject to a price cap of CPI – 4.5 per cent.

In the draft report, the ACCC recommended that local call services should be included in a broad basket containing line rental, domestic and international long-distance call services and FTM calls.

Many submissions to the discussion paper and participants at public meetings supported the inclusion of local calls in the retail price control arrangements (e.g. ATUG, p. 2; Chime, Perth public meeting). Chime was particularly concerned about the removal of price controls from local calls as it would impact on its customers who obtain dial-up internet. Conversely, in its submission to the discussion paper, Optus supported the removal of all price controls on fixed-telephony services (p. 10).

5.1.3 Connections

Connection services are currently in a stand-alone basket and are subject to a cap of CPI. In the draft report, the ACCC recommended the continuance of this price cap.

Mrs Noela MacLeod, Country Women's Association of Victoria, commented in the Melbourne public meeting that the cost of connections to customers in rural areas can be extremely high. Mrs MacLeod noted 'particularly if you live out in an area and you are the only person along the road and there is a lot of new housing in some areas going in. I mean there is a tremendous cost to these people who just want a service'.

There was some support for the ACCC draft recommendation that once-off costs associated with connection for residential services should be subject to an individual price cap.

5.1.4 Domestic and international long-distance

Domestic and international long-distance calls are component services within the basket of call services which is subject to a price cap of CPI – 4.5 per cent.

In the draft report, the ACCC recommended that domestic and international long-distance services should be included in a broad basket containing line rental, local calls and FTM calls. However, the ACCC indicated that it would further consider the removal of such services from the price control baskets in the final report.

As in submissions to the discussion paper, submissions again expressed the view that domestic and international long-distance calls should be removed from price control arrangements (CCC, p. 2; CTN, p. 2; Hutchison, p. 2). This was generally on the basis that the markets for such services are increasingly competitive. For example, Mr Gary Voss, TransACT, commented in the Canberra meeting:

The retail call cost, certainly from our point of view, is under constant competitive pressure....The remarkable drops in the price of data transmission and international and STD calls, most of that, in our case, has been passed directly through to the customer. So we certainly don't see that price is being driven down by regulation rather than by ferocious competition between providers.

Telstra and Optus submitted that if retail price controls were to remain, domestic and international long-distance call services should not be removed from the price control baskets. Telstra (p. 5) and Optus (pp. 3 and 8) considered that if the ACCC were to remove those services from the broad-based cap, then the retail price control essentially becomes a narrow-based cap on local calling and FTM services. This would reduce pricing flexibility, thereby defeating the purpose of the broad-based cap.

Optus also submitted that it would be inappropriate to remove domestic and international long-distance calls while leaving FTM calls in the price cap basket. Optus contended that FTM calling services are in the same (preselected) market as long-distance services and as such it would be illogical to rule domestic and international long-distance services as effectively competitive whilst simultaneously ruling FTM as not competitive (p. 9).

Mr Fowler supported the ACCC's draft decision to keep domestic and international long-distance subject to price cap regulation. This was because consumers acquiring products such as HomeLine Budget face 'significantly higher per minute-rates for domestic and international long-distance calls' (p. 2).

5.1.5 Fixed-to-mobile

FTM calls are a component service within the basket of call services which is subject to a price cap of CPI – 4.5 per cent.

In the draft report, the ACCC recommended that for future price control arrangements, FTM services should be included in a broad basket containing line rental, local calls and domestic and international long-distance call services. The ACCC did not recommend a specific cap for FTM services.

As in submissions to the discussion paper, submissions continued to argue for a specific FTM cap (e.g. Australian Consumers' Association, p. 1; CCC, p. 2; Hutchison, pp. 2–4; Virgin, p. 2).

Submissions argued that FTM calls should be subject to a specific sub-cap to mirror the ACCC wholesale price reductions for the Mobile Terminating Access Services

(MTAS) outlined in *Mobile Services Review*. This would ensure the wholesale price reductions are passed through to consumers in the FTM market. In the absence of a specific sub-cap, submissions argued it would be unlikely that the wholesale price reductions will be passed through to consumers.

Virgin noted that Telstra's high market share and substantial market power in FTM calls means that it lacks incentives to pass through any savings from lower MTAS (pp. 2-3). Hutchison (pp. 2-4) and the Australian Consumers' Association (p. 1) argued that without an effective price cap on FTM calls, the only mechanism for promoting pass through in this market would be competitive market forces, which have so far proved ineffective.

In the absence of a sub-cap for FTM, Hutchison supports the ACCC's draft recommendation that FTM calls remain subject to the price cap as part of a basket of services (pp. 2, 4).

Telstra supported the ACCC's draft recommendation to not impose a FTM sup-cap (p. 5). In submissions to the discussion paper, Telstra (p. 16) and Optus (pp. 31-33) were opposed to a separate sub-cap being applied to FTM services. At the Sydney public hearing, Mr Paul Fletcher, Optus, stated:

We are strongly opposed to the suggestion of a separate price cap on fixed-to-mobile. The ACCC has recently introduced very intrusive regulation into fixed-to-mobile in pursuit of the stated objectives, and presumably the ACCC considers that if such intrusive regulation is necessary then it would not think it was necessary to bolster that with something else, as that would tend to suggest a lack of confidence in the original measure that was proposed.

However, Mr Charles Britton, Australian Consumers' Association, considered that the *Mobile Services Review* and the price control arrangements should work in tandem, noting in the Sydney public meeting:

The ACCC moving [to put fixed-to-mobiles in a separate basket] wouldn't, in any way, reflect a lack of confidence in the original determination and, in fact, in our view it would be a necessary corollary.

In its submission to the discussion paper, Vodafone considered that there is a case for the FTM cap to be split between residential and business customers (p. 7).

5.1.6 Mobile services

Mobile services are not currently subject to price cap regulation. In the draft report, the ACCC recommended that future price control arrangements should not apply to mobile services.

Interested parties commented on mobile services (including CDMA services), pre-paid mobile services and SMS.

Mobile services

Telstra (p. 5) and Virgin (p. 4) supported the ACCC's draft decision to not impose retail price regulation on mobile services. In submissions to the discussion paper, Vodafone (pp. 3-4) and Optus (pp. 33-34) strongly opposed the return of mobiles into the price caps on the basis that the market is effectively competitive.

On the other hand, CTN contended that there is a pressing need for the price cap regime to incorporate mobile services. CTN considers that young consumers, deaf consumers, and rural and regional consumers are gravely affected by the exclusion of mobile services from the price control arrangements (p. 3).

CTN argued that price controls are appropriate to ensure that the benefits of competition are enjoyed by rural and regional consumers who have only one choice of provider for fixed and mobile services, such as CDMA (p. 3).

Pre-paid mobile services

In the Hobart public meeting, Anglicare noted that its research indicated that 20 per cent of disadvantaged consumers do not have a telephone, and 25 per cent only have a pre-paid mobile phone. The reasons for the movement to pre-paid mobile phones appeared to be the lower upfront costs—including that consumers are not required to pay connection costs or reconnection costs when moving location; and the ability for the consumer to control the amount of telecommunications spend.

Submissions have noted that mobile phones are particularly popular among young people. Pre-paid services are used widely as a means of avoiding debt, but the trade-off is paying higher rates for calls (e.g. Mr David Tennant, Care Financial Counselling Service, Canberra meeting; CTN, p. 3).

There was concern that young and low-income consumers are paying excessively high prices for calls through the use of pre-paid mobiles. For example, in the Hobart meeting, Anglicare and TasCOSS noted that in calling local numbers from a pre-paid mobile, the call effectively becomes a timed local call. This was considered a great issue when those users make calls to agencies such as Centrelink, where the caller is often placed on hold for an extended period of time.

CTN argued that price controls on prepaid mobiles are needed to protect vulnerable young consumers who for a variety of reasons—they are not old enough to sign a contract, deemed a credit risk by service providers due to their age, or have no steady income to enable them to sign up for a plan with all of their cost benefits—are unable to acquire other telecommunications products (p. 3).

SMS

Interested parties advocated the use of price controls to protect disadvantaged consumers in relation to SMS.

CTN stated in its submission that SMS prices are significantly above cost. CTN noted that SMS costs around 2 cents per message to send, yet consumers are usually charged 20–25 cents per message (p. 3).

CTN argued that price controls on SMS may be appropriate to protect deaf consumers. Citing Australian Association of the Deaf statistics suggesting that deaf consumers use SMS at ten times the average, CTN contended that uncapped SMS costs may disproportionately affect the affordability of telecommunications services for deaf consumers. CTN considered that in the interests of equity, price controls on text-based services are needed to protect vulnerable consumers who rely on a heavily marketed and heavily utilised service (p. 3).

5.1.7 Internet services

Dial-up and broadband internet services have not been subject to price control arrangements. In the draft report, the ACCC recommended that future price control arrangements should not apply to internet services.

In its submission to the discussion paper, the Australian Consumers' Association suggested that dial-up and broadband services should be subjected to the price cap regime (p. 6). However, Telstra supported the ACCC's draft recommendation to exclude internet services from the price control arrangements on the basis that they are not generally seen as basic telecommunications services (p. 5).

5.1.8 Business customers

In the draft report, the ACCC indicated that it would consider the removal of services supplied to business customers—either to all business customers or a class of them—from price cap baskets in the final report.

Many submissions support the removal of business services from the price control regime (AAPT, p. 3; CCC, p. 3; Hutchison, p. 3). Hutchison (p. 3) and the CCC (p. 3) stated that there appears to be cross-subsidisation between business and residential customers. They supported the removal of business customers on the basis that their inclusion increases the opportunities for cross-subsidisation. Hutchison stated that the longer that anti-competitive cross-subsidising continues, the greater the opportunity for providers engaged in this activity to entrench their position with large corporate customers (p. 4).

AAPT considers that services supplied to both corporate and government customers, and business customers requiring more than five lines, should be excluded from future price controls (p. 3).

Telstra (p. 5) and Optus (p. 9) strongly opposed the removal of business services from the basket stating that it represents a tightening of the price cap and reduces pricing flexibility—which they claim contradicts the ACCC's preference for broad baskets to allow pricing flexibility.

5.1.9 Views of the ACCC on services and market segments to be subject to price caps

The ACCC considers that a service or market segment should only be subject to a price cap in order to achieve economic objectives where this would materially align market outcomes with what would be reasonably expected within an efficiently competitive market. As such, whether or not a price cap should be applied depends largely on the level of competition that is reasonably expected to exist within markets or segments of markets.

Price controls can be used to help move the prices of telecommunications services closer to those expected in competitive markets, thereby promoting efficiency in ineffectively competitive markets. It follows that services which are not subject to effective competition should be considered for price cap regulation. However, where

there is a risk that price controls may not achieve efficiency objectives, forbearance may be appropriate.

Chapter 4 outlined the ACCC's views on the state of competition in respect of various services, including those that are currently subject to price control arrangements.

PSTN voice services

PSTN voice services comprise:

- line rental, local calls, connections services
- domestic and international long-distance services
- fixed-to-mobile calls.

In chapter 4, the ACCC concluded that the markets in which these services are supplied were not effectively competitive. That said, the ACCC noted that there are indications that greater competitive constraints exist in the supply of services to larger business customers.

The ACCC notes that fixed line services, including line rental, local calls, domestic and international long-distance services and fixed-to-mobile services, are often supplied together. To offer pre-selection, a service provider must offer domestic and international long-distance services and fixed-to-mobile calls. Further, pre-selectable services are often supplied in conjunction with line rental and local calls to offset the losses incurred in the local telecommunications markets.

Given this, it follows that the bundle of services as a whole should be considered in determining whether price caps should be maintained over the PSTN voice services. As the ACCC considers that PSTN voice services are not subject to effective competition, it recommends that they be subject to price caps.

The ACCC notes that many submissions supported the removal of domestic and international long-distance calls from the price caps. This was based on the argument that the markets in which these services are supplied are effectively competitive and that their inclusion therefore may weaken the effectiveness of the price cap on other services in basket.

However the ACCC is of the view that the markets in which these calls are supplied are not yet effectively competitive. In addition to the reasons outlined in chapter 4, the ACCC remains cautious of the removal of such services from the price caps because:

- Telstra's prices for the services remain well above imputed costs, which may be influenced by distortions in the local telecommunications markets
- while long-distance services may potentially be more competitive than other fixed-line services, it is unclear how competition will emerge over the future price control period.

In relation to the first point, an ACCC review of the LCS pricing methodology may address these concerns. The review will cover the present concerns regarding price squeezes, and may have flow-on consequences on competition and the margins for long-distance services.

The second point outlines concerns about how competition for these services will develop overall, or in respect of different segments. The ACCC notes that non-metropolitan consumers spend significantly more on domestic long-distance calls than metropolitan consumers. In this regard, there are potential costs to non-metropolitan consumers if the price caps are removed from these services. These concerns may be mitigated over the future price control period if greater facilities-based competition emerges in regional areas or if the reliance by non-metropolitan consumers on long-distance services decreases as a result of initiatives such as revision to Telstra's call charging boundaries.

At this point in time, the ACCC considers that the benefits of removing long-distance services from the price caps are not outweighed by the potential costs. That said, the inclusion of domestic and international long-distance services in the price caps is a matter that should be reassessed during the next review of the price control arrangements.

Mobile and Internet services

In relation to mobile and internet services, the ACCC recommends that price caps should not be applied as it is not considered likely that retail price controls will assist in simulating effective competition in these markets to a material extent.

The following factors were taken into consideration in respect of mobile services:

- As price control arrangements do not address the underlying reasons for competition being less than effectively competitive, the ACCC's preferred course of action is to address the factors inhibiting effective competition and use price control arrangements where other pro-competitive reforms can not be implemented. The ACCC would prefer to observe the impacts of its recent *Mobile Services Review* before it would consider advocating a re-introduction of a price cap over mobile services.
- There is some indication that competition is growing in some segments— e.g. the segment of users that spend at least \$50 a month on calls— although it is not clear whether this will extend to other segments or for what period for which this competition will be sustained.

Suggestions for pre-paid mobile phones, SMS and CDMA price caps to be implemented were generally made on social equity grounds, that is, to protect potentially disadvantaged consumers. If it is considered appropriate to address these issues by way of price control arrangements that apply to Telstra, the ACCC would consider that this should be done by more targeted measures rather than the introduction of price caps.

In relation to dial-up and broadband internet services, the ACCC is not of the view that price caps are appropriate at this point in time. This is because:

- the markets for these services are currently experiencing significant change, such as rapidly expanding demand for broadband services, associated substitution away from dial-up internet services and a proliferation of service offerings and price points. In light of this, any price caps may become far removed from the realities of the market within a relatively short timeframe
- some arguments in favour of internet services to be included in the arrangements appear to be based on the principle that all consumers should have reasonable access to internet services—the ACCC notes that the Digital Data Service Obligation (DDSO) already goes some way towards this.⁵²

Business customers

The ACCC considers that although the supply of line rental, local calls, domestic and international long-distance calls, and FTM calls to business customers, as a whole, may not be effectively competitive, there are grounds to believe that greater competitive constraints exist in respect to their supply to larger business customers. This is because:

- significant discounts below standard prices are available to business customers who can negotiate individual contracts—indicating that Telstra is actively responding to competition in the business segment
- the imputation margins that Telstra reports are generally lower in the supply of services to business customers compared to residential customers⁵³—suggesting that greater competition may exist in supplying services to business customers, as average prices are closer to imputed costs
- a reasonable level of facilities-based competition has emerged in the CBD areas of some capital cities, and competition generally appears to be greatest where facilities-based entry has occurred successfully.

The ACCC would expect that the class of business customers that would benefit from this greater competition will increase to some extent, and that the increase would depend on whether the customer could access competing service providers' facilities. While competing service providers are making some investments in facilities—in particular in overlay DSL networks—the ACCC considers that these networks will be limited to lower-cost areas and would generally be used to supply customers requiring multiple lines. This is discussed in chapter 8.

⁵² The DDSO complements the USO and ensures all Australians have access on request to a data service with a 64 kilobit per second (kbit/s) digital data capability. Services under the DDSO are supplied at commercial prices after industry funded rebates, where appropriate, are taken into account.

⁵³ For example, imputation testing conducted in the September quarter 2004 show that for bundles of fixed voice services (comprising line rental, local calls, domestic and international long-distance calls and FTM calls), greater margins are available for residential customers (9 per cent) compared with business customers (3 per cent)—see ACCC, *Imputation Testing Report relating to the Accounting Separation of Telstra for the September Quarter 2004*, December 2004.

Based upon the above, the ACCC considers that services supplied to larger business customers should be excluded from the price-capped services. This is because including these services within the price capped services would be unlikely to lead to pricing outcomes for those customers that were materially more consistent with an effectively competitive market.

In the draft report, the ACCC suggested that services supplied to the following classes of business customers could be considered for exclusion from the price-caps:

- corporate and government customers
- business customers requiring more than five lines—i.e. as the class is drawn in the *Customer Service Guarantee*.

The ACCC considers that the second option should be adopted. The ACCC considers that customers requiring multiple lines rather than just corporate and government customers alone will be able to access more competitive services. Also, indications are that requiring more than five lines will attract more competitive offers. It can also be noted that this would be consistent with the delineation of customers specified in the *Customer Service Guarantee*. Consistency in definitions between regulatory agencies may ease any administrative burden for Telstra in reporting on its compliance with the price caps. Therefore, the ACCC recommends that business customers requiring more than five lines be excluded from future price caps.

5.1.10 Views of the ACCC on structure of baskets

General preference for broad based baskets

The ACCC has a general preference for broad based baskets. There are two main reasons for this preference.

Firstly, broad baskets provide a greater scope for Telstra to be flexible in its pricing, which is likely to be more efficient than individual price-caps on each service. A broad basket of services allows a service provider to use Ramsey pricing to minimise the efficiency losses from covering common costs.⁵⁴ Under Ramsey pricing, prices are raised above attributable cost proportionately more for services that are least sensitive to price changes. That said, the degree of competition for some services may have increased over time, which may have resulted in Telstra implementing Ramsey pricing that responds to Telstra's own elasticity of demand for the services, rather than that of the market. This may be consistent with reduced efficiency gains compared with the pure monopoly circumstance.

⁵⁴ Ramsey pricing is where the producer raises the price of each service above long-run marginal costs in a way that will distort each market in such a way as to minimise the loss in efficiency from raising a given amount of common cost contribution. Under this approach, the producer raises prices proportionately more where demand is least sensitive (more inelastic) to changes in price. For a greater discussion of this approach, refer ACCC, *Review of Price Control Arrangements—An ACCC Report*, February 2001, pp. 27–54.

Secondly, productivity improvements—on which real price reductions are based—can be anticipated with greater confidence, meaning it is more likely that the price controls would be specified at an appropriate level.

The ACCC also notes that as sub-caps impose additional restrictions on the movement of the price of services within a broader basket, it considers that they should generally be avoided unless there is good reason to do so otherwise.

ACCC concern over further increases in line rental prices

Having said that, the ACCC is particularly concerned to ensure that any further increases in prices for the line rental service reflect efficient pricing outcomes, and are not made by Telstra simply because it has a greater degree of market power for this service.

Given the potential for increased line rental prices to more than recover Telstra's line rental costs within the next price control period and Telstra's high degree of market power in local telecommunications services, the ACCC would be concerned that any increases in line rental prices may potentially be used to cross-subsidise other services.

Further, given that rising line rental prices have a greater effect on those consumers that make fewer than average calls, the ACCC considers that call plans should be offered to those consumers on terms that are no worse than those currently on offer.

As such, the ACCC considers that the greater flexibility to price retail line rentals that is implied by the specification of a single broad basket should be moderated by specific arrangements to discourage further increases in line rental prices that would be to the detriment of competition or to the detriment of consumers that make fewer than average calls. In the draft report, the ACCC identified two ways in which this could be done:

- a CPI – X cap on line rental or
- a cap restricting the prices on the HomeLine Part and BusinessLine Part products (the basic telecommunications service consisting of line rental and local calls only).

Under the first approach, where increases in the price of the line rental service would be constrained by a CPI – X cap, it can be noted that:

- it is a direct control over average line rental prices and so actual price movements can be predicted with greater confidence
- the recommended exclusion of larger business consumers will result in greater restraint on line rental price changes for all residential and remaining business consumers
- as it constrains the prices charged for all line rentals without allowing line rental increases to be offset against reductions in the price of calls, it would tend to inhibit the offering of subscription style services—where all calls are bundled with line rental into a single charge—or other plans that feature heavily discounted call plans.

The second approach focuses on HomeLine Part and BusinessLine Part,⁵⁵ the Telstra retail services that consist only of line rental and local calls. These are the plans that are acquired by retail consumers who pre-select another carrier for their calls and also operate as the reference price at which Telstra provides wholesale line rental to other service providers. As noted by Telstra:

For the most part, wholesale customers receive the pricing plan which only incorporates the basic telephone service with local call rates excluding long distance and fixed to mobile calls (with the ‘business’ and ‘residential’ differentiation still applying).⁵⁶

By restricting the price increases that could be made on these particular retail products, the ACCC considers that there could be a reasonable degree of confidence that further price increases for other line rental plans will be limited as:

- Telstra will be obliged to continue to offer a basic telecommunication service consisting of line rental and local calls at prices in line with those at which HomeLine Part and BusinessLine Part are now supplied
- competing service providers would not be required to pass on any Telstra line rental price increases as they would have in the past
- if customers did not consider Telstra’s price increases to be appropriate to their circumstances, they would have the option of churning to a competing service provider that offered a more appropriate line rental plan.

In favour of this approach, Telstra would have greater flexibility—e.g. to offer subscription style plans—as this particular price control arrangement would only apply to one product and not the entire line rental service. That said, the entire line rental service would remain in the broad based basket and any increases in line rental prices would need to be offset against reduced call prices.

Against adopting this approach, it relies upon competing service providers to enter the market and compete around prices charged for local access services. While Optus has recently made some initiatives on this front,⁵⁷ overall competition in the supply of these services has been particularly weak.

The ACCC considers that the second option—a separate cap on HomeLine Part and BusinessLine Part—would be preferable. This approach addresses the ACCC’s concerns regarding further line rental price increases while preserving a greater degree of pricing flexibility. The approach may also provide greater certainty to industry over the pricing of the wholesale line rental service that they acquire from Telstra. Consequently, competing service providers may be able to offer line rental and local

⁵⁵ The inclusion of a price control over BusinessLine Part is on the basis that at least some business services remain subject to future price control arrangements.

⁵⁶ Telstra, *2004 Annual Report*, September 2004, p. 75.

⁵⁷ Optus, *Optus Slashes International Rates and Rolls Back Line Rentals*, media release, 1 September 2004.

calls at prices that closely approximate HomeLine Part and BusinessLine Part, in conjunction with attractive prices for other call services.

ACCC recommendations on basket structure

A basket consisting of line rental and call services

The ACCC considers that all ongoing services that are recommended to be subject to a price cap—line rental, local calls, fixed-to-mobile calls and domestic and international long-distance calls—should be included in a single broad basket.

A basket consisting of connections services

The ACCC considers that the once-off costs associated with connection services indicate that a separate basket is appropriate.

Further price control on line rental

In addition, the ACCC considers that a discrete price cap should apply to Telstra's basic telecommunications service consisting of line rental and local calls only.

The ACCC considers it appropriate that the line rental service as a whole is contained in the broad basket, while HomeLine Part and BusinessLine Part are contained in a separate basket, as it will better ensure that further line rental price increases are offset by reductions in call prices.

5.1.11 Views of the ACCC on level of price caps on baskets

The broad based basket of line rental and calls

The ACCC considers that for the broad based basket, it would be appropriate to determine a price cap of CPI-X where:

- CPI is the historical eight capital average CPI recorded in the year to the previous March quarter
- X is 4 per cent.

The ACCC's approach to determining a reasonable price cap and in measuring its constituent elements is more fully discussed in Attachment A.

In setting this price cap, the aim is to determine the capacity for Telstra to reduce the prices of the price-capped services as a consequence of Total Factor Productivity (TFP) growth. Setting an X on this basis will mean that productivity improvements are passed on to consumers as lower prices.

In undertaking this analysis, the ACCC has measured the productivity gains that have occurred in the last five years for the infrastructure over which the price capped services are supplied. An infrastructure level approach was adopted in order to overcome the difficulty in isolating the shared inputs that are attributable to a relatively narrow range of services. The analysis was undertaken on a conservative basis and would tend to understate the productivity gains that have been experienced.

The ACCC has also had regard for anticipated developments that would reasonably be expected to influence productivity gains within the next price control period.

Finally, the ACCC deducted the estimated economy-wide productivity improvement from the productivity gains estimated for this basket of services to arrive at an X of 4 per cent. This recognises that economy-wide productivity measures are already reflected in the CPI value.

The basket consisting of connections

The ACCC considers that this price cap should be set at CPI, where CPI is the historical eight capital average CPI recorded in the year to the previous March quarter.

At this time, the ACCC does not consider that there are likely to be substantial productivity improvements in the connections service that would necessitate an X being set so as to pass through such improvements to consumers in the form of lower prices.

The basket containing HomeLine Part and BusinessLine Part

The ACCC considers that this price cap would need to address the line rental and local call component products separately.

The ACCC considers that the price cap that applies to the line rental component product should be set at CPI, where CPI is the historical eight capital average CPI recorded in the year to the previous March quarter.

The ACCC considers that by the conclusion of the current price control arrangements, the revenues that Telstra derives from the line rental service will approximate the efficient cost of supplying it, and as such the current policy of rebalancing should be discontinued.

In 2001, the ACCC estimated the average cost of supplying the line rental service was \$346 plus retail costs⁵⁸. While the ACCC has not undertaken a detailed analysis to estimate the cost of supplying the line rental service today, the ACCC considers that these costs would have declined. The factors that would indicate that this cost has fallen are:

- demand for the ADSL service—a service that shares common costs with the line rental service—has become significant and continues to grow strongly
- Telstra’s weighted average cost of capital has declined due to a reduction in the long term bond rate
- a greater proportion of services are now in areas where developers bear the costs of trenching.

Against this, the following factors limit the extent to which costs may have fallen:

⁵⁸ ACCC, *Review of Price Control Arrangements—an ACCC Report*, February 2001, p. 75.

- line rental demand has declined
- prices of equipment used in providing the line rental service—for instance, copper pairs, pillars and site costs—may have increased.

In addition, the ACCC recommends that the discount that exists between the line rental component product and Telstra’s standard line rental product (i.e. the most popular line rental product, which the ACCC understands is HomeLine Plus for residential customers) should be preserved. This would require that the annual price movement for the line rental component product could not exceed the price movement for the standard line rental product.

Similarly, the ACCC considers that the price movement of the local call component product should be pegged to the price that Telstra offers for local calls supplied with its standard line rental product (‘the standard product’). The price control would require that the annual price movement for the local call component product could not exceed the annual price movement of the standard product. This is considered necessary to ensure that competition is not lessened by further divergence in the bundled and unbundled prices for local calls.

5.2 Other price control arrangements

5.2.1 Metropolitan/non-metropolitan price relativities

The price control arrangements currently require:

- The revenue-weighted average untimed local call price for residential and charity customers in non-metropolitan Australia in a given financial year is not to exceed the revenue-weighted average untimed local call price for residential and charity customers in metropolitan Australia in the previous financial year by more than 0.4 per cent.
- The revenue-weighted average untimed local call price for business customers in non-metropolitan Australia in a given financial year is not to exceed the revenue-weighted average untimed local call price for business customers in metropolitan Australia in the previous financial year by more than 0.4 per cent.

In the draft report, the ACCC stated that direct government initiatives may be a better way to improve access for regional and rural consumers than the current metropolitan/non-metropolitan local call relativity provisions. However, the ACCC did not recommend ending the current relativity provisions.

Views of interested parties

Submissions to the discussion paper indicated that Telstra’s dominance in regional and rural areas is significant and that the likelihood of facilities-based competition developing in many of those areas is less than for metropolitan areas. Rural customers may therefore not share in the benefits of competition.

Optus' submission to the discussion paper presented its own analysis suggesting that the cost of carrying a call in metropolitan and rural areas may not be as disparate as indicated by Telstra. Optus suggested that it might be appropriate to maintain the current local calling relativities until there is evidence of competition emerging in rural areas (pp. 26–27).

There was a general concern about the higher cost of telecommunications services in rural areas. As noted in the Melbourne meeting by Mrs Noela MacLeod, Country Women's Association of Victoria, consumers are sometimes disadvantaged by distance. The following points were raised in several public meetings:

- Mr Chris Ryan noted in the Dubbo meeting that his dial-up internet connection continually drops out. The subsequent re-dialling raises the cost of the internet service. Participants queried whether such drop-outs were an inducement to encourage people on to broadband—despite it being unlikely that ADSL will be deployed in many regional exchanges in the near future.
- Mr Anthony Chan noted in Wagga Wagga that an income disparity already exists between metropolitan and regional areas, as the cost of other services such as petrol and groceries were also higher in regional areas.
- The WA Government stated in its submission to the discussion paper that regional and some metropolitan customers are already facing substantial disadvantage in the availability and cost of telecommunications services. Removing or relaxing price controls is likely to exacerbate this disadvantage (p. 7).

Mr John Clements, representing Mr Tony Windsor, MP, considered in the Dubbo meeting that if the current relativity was removed, then Telstra would increase the price of calls to his area. In the Sydney public meeting, ATUG commented that 'regional users should have access to the same services at the same prices and levels of services as urban-based customers'. As a result, ATUG considers that the geographic relativity provisions should stay.

Views of the ACCC

The local call pricing relativity requirement is intended to ensure that customers in non-metropolitan areas have access to local calls at prices that are close to those in metropolitan areas. The ACCC notes that the price of local calls in non-metropolitan areas is on average within 5–10 per cent of the average price charged by Telstra for local calls as a whole.

Past studies suggest that there is a disparity between the cost of supplying local call services in metropolitan and non-metropolitan areas. Although the precise amount by which the cost of supplying local calls in non-metropolitan areas differs to the cost of supply in metropolitan areas is not known, the cost per call would be materially greater in non-metropolitan areas. This is in a large part due to fewer services-in-operation in those areas and much less demand per service-in-operation for local calls.

While the local-call relativity requires Telstra to price local calls in non-metropolitan areas proximate to the price of local calls in metropolitan areas, Telstra has faced relatively weak competition in local call markets. In these circumstances, the effect of

this requirement has been that customers in metropolitan areas have paid higher prices and customers in non-metropolitan areas have paid lower prices than they are likely to have paid, other things being equal.

The likely consequences of this are:

- since the resulting prices for local calls represent price–cost disparities, Telstra’s pricing will be relatively inefficient—Telstra would have to charge more on average for local calls than it would otherwise in order to recover its costs in supplying local calls from the revenues that it derives from them
- consumption and investment decisions in both metropolitan and non-metropolitan areas will be distorted, with investment by competing service providers in non-metropolitan areas becoming relatively less likely—this will tend to entrench the limited competition in non-metropolitan areas.

There may be similar efficiency losses from the low-income scheme. However, the social equity grounds for those efficiency losses are more clear-cut in that case. Comparatively, it can not be said that all rural consumers, regardless of income, would be unable to pay for relatively higher local call services if the current local call geographic relativity was removed.

The ACCC notes the comments that rural consumers already face generally higher costs and poorer telecommunications service quality. This can be seen as a symptom of the lower levels of competition in non-metropolitan areas.

It can be noted that removal of the local call relativities may have more pronounced consequences for non-metropolitan customers that use dial-up internet services, as dial-up internet calls are charged at untimed local call rates. It has been argued that non-metropolitan customers experience relatively greater incidence of call loss than metropolitan users necessitating more calls. Access to the internet without a phone call, such as broadband, is more restricted in non-metropolitan areas. Retaining the current geographic relativity may protect consumers from excessive dial-up costs which would further erode the quality of internet services in non-metropolitan areas.

Overall, there are two conflicting objectives present in the current local call geographic relativity. There is an efficiency consideration in allowing prices to accurately reflect the cost of delivering the service. Against this there is a social equity objective in achieving some price equality in non-metropolitan areas where competition is less viable.

While the ACCC does not recommend its removal, it considers that the local call relativity requirement can create inefficiencies in the provision of local call services, and as discussed in section 9.4, other mechanisms, such as government subsidies, could be used to deliver more equitable conditions for non-metropolitan consumers.

5.2.2 Untimed local calls

The price control arrangements currently require that the maximum price for untimed local calls is generally 22 cents for calls made from a residential or business phone, and

40 cents for calls made from a public phone, except in the case of discount plans when a customer may on occasion be required to pay more than 22 cents per local call.

In the draft report, the ACCC recommended retention of these price controls. The ACCC noted that any increase in the price of local calls from payphones would be likely to impact heavily on low-income consumers but that it would consider an increase in the cap if it received cost information to support an increase.

Views of interested parties

Submissions generally supported the ACCC's draft recommendation to retain the current cap of 22 cents on local calls (e.g. Anglicare, p. 2; Telstra, p. 11). However, CTN believes the 22 cent cap per local call is an inflated price and the effects of rebalancing should have resulted in lower prices (p. 2).

Consumer advocates supported the ACCC's draft decision to retain the current 40 cent cap on local calls from Telstra public payphones. Participants at public meetings noted the importance of payphones for low-income and disadvantaged consumers, and that remote indigenous communities tend to rely on payphones.

In its submission to the discussion paper, CTN strongly argued that price caps on payphones must remain at the current rate (pp. 10–11). The WA Government's submission to the discussion paper noted an Australian Communications Authority recommendation that the ACCC should consider an increase in the price cap on local calls from Telstra payphones. The WA Government considered that 'the implied argument is that relaxing the price cap will remove an inadvertent margin squeeze on non-Telstra payphone providers'. In response, the WA Government noted:

- non-Telstra payphone providers are not compelled to supply payphone services in unprofitable areas
- Telstra receives a universal service subsidy as compensation for providing payphones in unprofitable areas (p. 10).

However, Telstra and the Payphone Industry Association (PIA) called for an increase in the cap from 40 cents to 50 cents. Both submissions noted that the current cap of 40 cents has been in place since October 1994, and that the introduction of the GST decreased revenues from local calls from 40 cents to around 36 cents.

The PIA contended that since the last price increase in 1994, operating costs for payphones operators have increased dramatically. Some of those cost increases included line rental (approx. 130 per cent), petrol (45 per cent), wages (65 per cent), superannuation guarantee (80 per cent), and insurance (pp. 4–5).

The PIA claimed that a rented Bluephone must make at least 884 local calls per month to break even—without allowing for other business costs such as vandalism. According to the PIA, most phones do not make anywhere near this number of calls in a month. Further, the PIA stated that public payphones are more expensive than Bluephones to maintain. The PIA considered that a price rise to 50 cents would be barely enough for payphone operators to keep afloat (p. 6).

Telstra claimed that the current cap is a barrier to competition, as the retail price does not reflect the true cost of providing the service (p. 12). Telstra and the PIA considered that potential operators have not entered the market as they cannot make a profit from payphones.

Additionally, Telstra (p. 12) and the PIA (p. 3) argued that the payphone market is being increasingly affected by mobile phone usage and call substitution by calling card providers—payphone operators do not receive revenue contribution if calling cards are used from public payphones.

Views of the ACCC

22 cent cap on local calls

In relation to the 22 cent cap on local calls, interested parties have not provided any information in support of a change to the current arrangements.

While Telstra has claimed in previous inquiries that its costs of supplying local calls are above the 22 cent cap,⁵⁹ those claims included a contribution to the access deficit in addition to actual costs.

While the ACCC has not undertaken a detailed cost study, it notes that:

- after removing the access deficit contribution, Telstra’s previous estimates would put the cost of a local call below the current cap
- the process of rebalancing has meant that the ‘access deficit’ has reduced significantly if not removed entirely
- hence any contribution that local calls would be required to make to the access deficit has been similarly reduced.

Further, the ACCC understands that the current average price of a local call that Telstra charges is significantly below the current cap of 22 cents.

The ACCC also notes that Telstra supports the retention of the current 22 cent cap.

Given the above, the ACCC recommends that the current cap on local calls should be retained.

The current price control arrangements provide an exception to the 22 cent maximum price where a customer chooses a line rental product that is priced below the standard Telstra line rental plan.⁶⁰ The ACCC recommends that the scope of this exception be considered further, given that the ACCC understands that the standard line rental plan is now HomeLine Plus and that the cap therefore does not apply to a significant proportion of residential customers. The issue is also considered in chapter 9 in the context of local calls supplied to low-income consumers.

⁵⁹ ACCC, *Review of Price Control Arrangements—an ACCC Report*, February 2001, p. 80.

⁶⁰ The standard plan is defined as the most popular plan.

40 cent cap on local calls from payphones

The ACCC has sought to consider whether this price cap should be increased, given its effect on competition and efficiency in the supply of payphone services, and on potentially disadvantaged consumers.

The Australian Communications Authority's *Payphone Policy Review* report concluded that conditions exist for a body such as the ACCC to consider an increase in the price cap on local calls from Telstra payphones, but any decision would require a balancing of several conflicting goals.⁶¹

While parties have submitted that the current price cap on local calls made from payphones are impeding the recovery of the cost of providing payphone services—and hence impeding efficiency and the development of competition—the information provided is insufficient to allow the ACCC to properly assess this claim.

However, some general points can be made.

Telstra, as the primary universal service provider, is required to ensure that payphones are reasonably accessible to all people in Australia regardless of where they reside or carry on a business. Thus, irrespective of the price cap, Telstra is required to provide payphones.

It can be noted that:

- Telstra receives general brand recognition as a supplier of payphone services
- Telstra plans to use its payphone infrastructure to supply wi-fi broadband services in some areas⁶²
- Telstra receives subsidies through the USO in connection with its supply of payphones in non-profitable areas.

As such, the ACCC considers that the most relevant issue is whether companies other than Telstra are able to compete in the supply of payphone services.

The ACCC considers it unlikely that the price cap will bind customer-operated payphone services—i.e. payphones supplied in pubs, clubs or private shops. The ACCC considers that these service providers could price local calls above the 40 cent cap.

It can also be noted that:

- the contestable payphone market appears to be limited to payphone services supplied within public facilities such as shopping centres—as noted by the ACA, the payphone industry can still be quite lucrative and profitable in particular areas⁶³

⁶¹ ACA, *Payphone Policy Review*, February 2004, p. 5.

⁶² M. Sainsbury, 'Telstra to share rival's 3G network', *The Australian*, 13 July 2004.

- competing service providers are facing declining revenues as a result from ‘free-to-caller’ calls,⁶⁴ and that this has the potential to compromise the commercial viability of competing payphones—as such, it could not be assumed that an increase in the existing price cap on local calls would ensure that competing payphone services continue to be supplied.

Turning to the consequences for potentially disadvantaged consumers, the ACCC notes comments in submissions and the conclusion reached in the ACA’s *Payphone Policy Review* report that payphones have a proportionally higher usage by disadvantaged people and are therefore important for social equity.⁶⁵

The ACCC considers that any increase in the cap on local calls from payphones would be likely to have a greater effect on potentially disadvantaged consumers relative to other consumers, given their proportionally higher usage.

However, if a scheme could be effectively implemented whereby potentially disadvantaged consumers could be compensated for any increase in the cap—such as by supply of a discounted phonecard product for such consumers— then the ACCC’s present social equity concerns may be lessened to an extent. As is the case with any scheme targeted at disadvantaged consumers, effective promotion of it would be a necessary pre-condition to its overall effectiveness.

The ACCC does not consider that a sufficient argument has been made on economic grounds to support an increase in the cap on local calls from payphones. The ACCC also considers that there are significant social equity concerns that argue for retention of the current 40 cent cap. Therefore, the ACCC recommends the retention on the current cap on local calls made from payphones.

5.2.3 Extended zones

Under the current arrangements, calls in and between adjacent extended zones, and BigPond calls made from these zones, are required to be charged as untimed local calls. Telstra receives a government subsidy the supply of these calls.

The current price control arrangements also specified a price cap of 27.5 cents per 12 minute block for preferential calls until these calls were charged as untimed local calls. The ACCC understands that Telstra now charges these calls as untimed local calls and accordingly this provision is redundant.

In the draft report, the ACCC recommended continuance of this price control.

⁶³ ACA, *Payphone Policy Review*, February 2004, p. 27.

⁶⁴ These are calls that can be made from a payphone without payment, and includes calls to 1800 numbers, pre-paid calling cards and reverse charge calls.

⁶⁵ ACA, *Payphone Policy Review*, February 2004, p. 24.

Views of interested parties

In the Dubbo public meeting, Mr John Clements spoke in favour of the charging of calls within extended zones as local calls. Mr Clements considered that the extended zones should be specified by a regulatory body by way of disallowable instrument.⁶⁶

Mr Duncan Kerr, MP, supported the ACCC's draft recommendation to retain extended zones (p. 1).

Views of the ACCC

There are 102 extended zones which collectively cover 80 per cent of Australia's land area. Around 40,000 services are supplied in an extended zone.⁶⁷

As extended zones are in areas with relatively few consumers, it is likely that charging these calls at a similar price as an untimed local call would prevent Telstra recovering the cost of these calls from the prices it charges for them. Whether this is the case and the extent of any disparity between price and cost would depend upon a number of factors.

However, as Telstra receives government subsidies to price these calls the same as untimed local calls, the concerns that the ACCC would otherwise have about the pricing of calls at below cost—higher prices for other consumers or services—do not arise here. Therefore, the ACCC recommends retention of the extended call provisions.

5.2.4 Dial up internet charges

When the current price control arrangements were enacted, dial-up internet calls were made to geographic numbers and ISPs typically maintained a point of presence in each local call area that they serviced.

In these circumstances, the legislative requirement to supply untimed local calls and the price control arrangements meant that these calls could be charged at no more than a local call, and that roughly the same average price had to be charged in non-metropolitan areas as was charged in metropolitan areas.

As such, the current price control arrangements have dealt with dial-up internet calls only incidentally, by specifying that this pricing arrangement should be made available by Telstra to its BigPond customers in extended zones. This provision implies a policy that dial-up internet access should be available at the price of an untimed local call.

However, since the current price controls were enacted, access calls to many ISPs have been migrated away from the geographic number ranges to the 0198 numbering range,

⁶⁶ This is an instrument that takes effect when it is issued but can be revoked—or disallowed—by Parliament.

⁶⁷ ACA, *Consumer Fact Sheet—Untimed Calls at Local Call Rates and Upgraded Services for Remote Australia*, updated 15 July 2004
<www.aca.gov.au/consumer_info/fact_sheets/consumer_fact_sheets/fsc33.htm>.

although a number retain local call dial-up numbers. Telstra's practice has been to charge the same for 0198 calls as for local calls.

In the draft report, the ACCC recommended that the price control arrangements should be varied to treat 0198 calls made to ISPs in the same way as untimed local calls.

Views of interested parties

In the Perth public meeting, Chime noted that there would be considerable impact on dial-up internet customers should access calls no longer be charged as untimed local calls. In that meeting, and also in the Wagga Wagga meeting, it was stated that the issue has relatively greater consequences for the supply of internet services in non-metropolitan areas.

CTN supported the ACCC's draft recommendation to cap dial-up calls to ISPs (p. 2).

Views of the ACCC

Telstra's practice has been to charge the same for 0198 calls as for untimed local calls. However, the ACCC notes that unless the price control arrangements are varied there will be no regulatory constraint requiring this pricing to continue.

To the extent that the dial-up internet calls are less reliable in non-metropolitan areas than in metropolitan areas, and broadband access is less available, any move away from pricing dial-up internet calls for untimed local calls would have greater consequences for non-metropolitan consumers.

The ACCC recommends that the 22c price cap on untimed local calls should also apply to 0198 calls made to ISPs.

5.2.5 Line rental for schools

Under the current price control arrangements, Telstra must offer a line rental service to schools at a price at or below the standard line rental offered to residential consumers.

In the draft report, the ACCC recommended that this control should not be included in future price control arrangements.

Views of interested parties

No comments were made by interested parties on this subject.

Views of the ACCC

The ACCC understands the basic principle for this price control arrangement. That said, the ACCC does not have any information on:

- the total demand for line rental services by schools
- the materiality of the benefit to schools of receiving discounted line rental, particularly as a proportion of operating expenditure.

Given the information deficiency, the ACCC does not have any basis on which to make an assessment of the importance of the price cap or any associated efficiency losses.

That said, the ACCC considers that price control arrangements may not be the most appropriate tool to provide subsidies to schools. If it is desirable to supply line rental services to schools at residential rates, then it may be more appropriate that such subsidies are directly funded by the government. Direct funding may minimise the potential for any efficiency losses, and would appear feasible given the existing arrangements for government funding to be provided to schools.

Given the above, the ACCC recommends that this control not be included in future price control arrangements.

5.2.6 Directory assistance and other incidental charges

Currently, changes to directory assistance charges are required to be notified to the Minister in advance, with the Minister able to disallow the proposed changes if they are considered not to be in the public interest.

In the draft report, the ACCC recommended that Ministerial consideration of directory assistance charges should remain, but not be extended to other ancillary charges.

Views of interested parties

CTN disagreed with the ACCC's draft recommendation. CTN has received complaints about the excessive cost of Telstra's 1234 directory service and that Telstra has buried reference to the free 1223 service. CTN considered that by omitting premium rate directory assistance from the price control regime, more consumers will be misled and overcharged to get information that should be free (p. 4).

The Australian Consumers' Association and CTN supported the application of price control arrangements to additional charges levied by Telstra on consumers, including late payment fees, account keeping fees, contract exit fees, credit card charges that are being passed on to customers, charges for bills (Australian Consumers' Association submission to discussion paper, p. 6; CTN, Sydney public meeting).

CTN questioned the validity of ancillary charges and believes that they are simply inflating the cost of basic telephone services—thereby significantly effecting the affordability of telecommunications services for consumers (p. 4).

Views of the ACCC

The ACCC notes that it is intended for charges to be subject to Ministerial notification and disallowance where they would have a competitive impact on other service providers or impact on community interests and expectations.⁶⁸

The ACCC currently considers it unlikely that the nature of the incidental charges or the current levels at which they are charged would lessen competition to a material

⁶⁸ Commonwealth of Australia, *Telecommunications (Consumer Protection and Service Standards) Bill 1998—Explanatory Memorandum*, 1998, p. 116.

extent. As such, the ACCC would only consider that these charges should be subject to Ministerial oversight where they impact on community interests and expectations.

Directory assistance charges can impact on the interests of the community as they are a necessary service for the making of calls. However, the ACCC believes that other incidental charges would generally not have such an impact.

The ACCC therefore recommends that Ministerial consideration of directory assistance charges should remain, but not be extended to other ancillary charges.

However, the ACCC notes that ancillary charges, particularly late payment fees, have the potential to impact more adversely on low-income consumers, although Telstra's Bill Assistance program may mitigate this impact.

5.3 Incentives to encourage efficient investment

5.3.1 Measures to encourage sustainable facilities-based competition

In submissions to the discussion paper, both Telstra (p. 10) and Optus (p. 19) raised the issue of whether future price control arrangements could be structured so as to encourage sustainable facilities-based competition.

In the draft paper, the ACCC considered that future price controls could provide greater certainty to investors and competing service providers that efficient investment costs could be recovered. The ACCC suggested that one way to do this would be requiring *ex ante* regulatory approval of price changes in areas where there is competing infrastructure build.

Views of interested parties

The *ex ante* approval mechanism received support from Hutchison (p. 5), CCC (p. 3) and Optus (p. 10), who all considered that there is merit in developing arrangements that will help to protect or stimulate investment in competing facilities. The CCC considered that monitoring activity in areas where there is facilities-based competitive entry is consistent with the objectives of price control arrangements and that acting to protect competition where it is the most vulnerable is a very direct device for ensuring that, in the long-run, price falls and product innovation is sustainable (pp. 3–4).

However, Optus considered that the ACCC's proposed use of the price control arrangements would prove complex to administer and may be subject to potential delay and gaming by Telstra (p. 10). Similarly, the CCC expressed concern that the information flows may burden the regulator. The CCC also stated that such a mechanism would not be novel in price control arrangements, pointing to the current arrangements for low-income consumers, but also felt that there would be numerous issues to be considered to ensure an effective regime. (pp. 3–6).

Telstra contended that the proposed arrangements would be heavy-handed and amount to the ACCC formulating strategic industry policy. Telstra argued that the arrangements would lead to higher prices, poor technological choices and inefficient investment by new entrants. It also considered that the TPA could be relied upon to

ensure that Telstra's responses are not anti-competitive and argued that relaxing the price controls would better protect facilities investment (pp. 9–10).

In its submission to the discussion paper, Optus considered that the key decision to be made in relation to facilities-based competition is whether to allow margins to remain in voice services to promote competition. Optus favoured retention of these margins (p. 21). In its submission to the draft paper, Optus was concerned that requiring real price reductions on Telstra may dampen investment incentives of competing carriers (pp. 3, 14–15).

Views of the ACCC

While interested parties have argued for the setting of more permissive price targets as a means to encourage investment in telecommunication facilities by competing service providers, the ACCC would see some difficulty with such an approach. More permissive price targets would:

- provide mixed incentives for existing service providers as more substantial returns would be able to be earned on existing investments (to the extent that Telstra priced up to the price targets)
- provide relatively weak signals for competitive entry since higher maximum prices would of themselves be unlikely to be indicative of prices following entry
- given that sufficient margins are already available to competing service providers that are as least as efficient as Telstra, permit market entry by less-efficient service providers or the use of less-efficient technologies (to the extent that Telstra priced up to the price targets)
- imply that anticipated future services should be in part funded by current end-users of traditional voice telephony who may not be able to access those services or value them.

Implementing any such scheme could prove problematic, as a judgment would need to be made as to what technologies should or should not be accommodated and what increments to current prices were necessary to ensure they were commercialised.

If financial encouragement is considered necessary to invest in new technologies, delivering this by way of direct government subsidy or tax allowances tied to actual investments made would be more effective than allowing higher prices for existing services and less detrimental to efficiency.

Based on the above, the ACCC would not recommend that discrete increments be built into the price targets. However it should be noted that there are significant margins available on the current price-controlled services and the price targets recommended by the ACCC do not seek to curtail these margins.⁶⁹ As such, the ongoing margins that are

⁶⁹ The price targets seek to pass through reasonably anticipated productivity improvements and not directly impact upon existing margins.

implied by the possible future price control arrangements would remain until such time as competition became effective.

Although the ACCC remains concerned that facilities-based competition may be foreclosed by anti-competitive practices, it would intend to address such matters in reliance on its existing functions and powers under the TPA including the tariff filing provisions⁷⁰. This is due to perceived practical difficulties in the administration of price control arrangements that included provisions requiring formal pre-vetting of price changes. That said, the ACCC discusses a perceived limitation in the existing tariff filing provisions below in respect of complementary arrangements.

5.3.2 Measures to ensure that investment incentives in price-controlled services are not dampened

The current price control arrangements provide for deemed price decreases for a service where the quality of the service has improved. Conversely, where the quality of service has deteriorated a price increase can be deemed—however the price deterioration must have occurred so as to circumvent the price control arrangements. Whether a price movement should be deemed to have occurred is left to the ACCC.

In the current price control period, the ACCC has allowed two value claims to a total value of around \$25m, in respect of Priority Assistance and 1#, and has more recently refused two value claims for Telstra Home Messages 101 and Talking Text.

In the draft report, the ACCC recommended the retention of the existing provisions with certain amendments to make them more effective.

Views of interested parties

In response to the draft report, Telstra contended that the proposed amendments may impede it in recovering its efficiently incurred costs, or are unnecessary as it is otherwise required to maintain its quality of service (pp. 10–11). Optus suggested that service quality concerns might be better dealt with by relaxing the price controls or improving the wholesale access regime (p. 10).

In submissions to the discussion paper, interested parties generally did not focus on the issue, although many consumers commented on Telstra's quality of service as an issue of concern. The ACA (p. 3) and AAPT (p. 10) expressed concern at the potential for deemed price reductions to have adverse consequences for end-users or for competition. Optus (p. 6) and Telstra (p. 9) commented that overly restrictive price control arrangements could dampen Telstra's incentives to maintain service quality.

Views of the ACCC

As a threshold issue, it can be noted that many of the network elements over which line rental and other price-controlled services are supplied are essential to the supply of all fixed-line telecommunications services. It is therefore relatively unlikely that Telstra would allow the infrastructure by which the price-controlled services are supplied to

⁷⁰ These provisions are contained in Division 4, Part XIB of the TPA.

deteriorate. However, the ACCC considers that it can still be in the LTIE for the price control arrangements to provide measures to preserve and enhance the existing incentives to invest.

While measures to provide such incentives are included in the current price control arrangements, the ACCC recommends that these provisions be revisited to clarify their nature and purpose and to ensure that they provide incentives to maintain service levels as well as to improve them. Regulation requires Telstra to maintain its fixed-line network⁷¹ and to provide a specified service quality for connections and fault-handling.⁷² However, quality associated with other terms and conditions of supply to customers, such as eligibility for bundling discounts, is not regulated. The ACCC believes that these other regulatory schemes would not provide the same incentives for maintaining service quality as an enhanced price control arrangement.

The ACCC would recommend that, while maintaining its role in determining whether a price movement should be deemed, the future price control arrangements should:

- maintain the current approach that only extraordinary capital investment should be considered—ongoing operating and maintenance of the existing network and new connections are already built into the prices of the line rental and connection services permitted under the price cap
- remove the current pre-condition that the deterioration in quality must be to circumvent the price controls before a price increase can be deemed—while a price increase should not be deemed due to transient causes reasonably beyond Telstra’s control, the current arrangements provide little discouragement to even deliberate and sustained measures to reduce service quality
- make it clear that the value of any deemed price movement would be determined by an analysis of the efficient net costs of the investment project—the scheme should operate as a pass-through mechanism only for efficiently incurred costs
- maintain the ACCC’s discretion (to be exercised having regard to the LTIE criteria⁷³), to ensure that claimed costs have been efficiently incurred or that investment programs have not been structured to the detriment of competition
- encourage Telstra to properly support any claims it makes in a timely manner.

Adopting these measures would encourage efficient investment and better assure service quality. They would also streamline the assessment process and improve the overall efficacy of the price control arrangements.

⁷¹ As per *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (Amendment No. 4 of 2002)*, which introduced network reliability conditions on Telstra.

⁷² *Telecommunications (Customer Service Guarantee) Standard 2000 (No. 2)*.

⁷³ Promotion of the LTIE is a guiding objective of the legislation under which the price control arrangements are made.

Telstra has generally claimed as quality improvements the bundling of product features with the line rental service—an exception to this is the introduction of *Priority Assistance*. It would be possible for Telstra to charge for these product features as discrete services outside the scope of the price control arrangements should it wish to do so. The only basis on which they become relevant to the price control arrangements is where Telstra chooses to bundle them with the line rental service.

It should be noted that Telstra is not limited in recovering the costs of all the investments that it makes pursuant to value claims under the price control arrangements. As the arrangements apply only to the specified services—and not to ancillary services—Telstra would have the option of supplying ancillary services separately to the price-controlled services and recovering costs by means of discrete charges that fall outside the scope of the price control arrangements. Telstra does this for a range of ancillary services.⁷⁴

Further, it is not the case that value claim provisions would operate in a confiscatory manner—Telstra may choose to recover its efficient costs directly. If anything, care needs to be taken to ensure that these provisions do not facilitate price increases to recover costs incurred in producing services that are not economic as stand-alone products offered to consumers—that is, the basic services are not ‘gold-plated’ with unwanted ancillary services.

More recently, Telstra has claimed quality improvements in respect of quality enhancements that it refuses to supply to other service providers, and which increase its overall profitability by generating additional call revenue. These factors militate against the acceptance of a value claim having regard to the LTIE criteria.

Telstra does not restrict its claims to a recovery of cost—it seeks to obtain credits to the full amount of the additional revenues that it considers it would be able to generate from the product feature. In addition to the fundamental issue as to whether such an approach could promote the LTIE, this type of analysis is by its nature difficult to undertake.

In practice, the consideration of Telstra’s claims has also proven problematic due to Telstra being unwilling to supply revenue, cost and demand data relevant to its claims. This has necessitated much greater research by the ACCC to fully consider claims, with adverse consequences for timeliness.

To better ensure that claims can be assessed more readily, and to provide appropriate incentives for Telstra in this regard, the ACCC recommends that the future price control arrangements also require Telstra to supply all data that the ACCC requests to assess the claim. Failure to supply this information by the end of the financial year to which the claim relates should provide grounds to refuse a claim.

⁷⁴ For a listing, see Telstra, ‘Optional phone features’ <www.telstra.com.au/phones/homeservices/features_optional.htm>.

5.4 Duration of price cap arrangements

The current price control arrangements are applied for three years.

In the draft report, the ACCC considered that three years would be an appropriate period for the future price control arrangements.

5.4.1 Views of interested parties

AAPT supported the ACCC's draft recommendation of a three year period (p. 2).

Submissions to the discussion paper and participants at public meetings provided a range of suggestions for the period of time to which future price control arrangements should apply. Responses ranged between two and five years.

5.4.2 Views of the ACCC

The government has generally adopted a three year period since price cap arrangements were first introduced in 1989.

In deciding the appropriate duration of the price control arrangements, the ACCC believes that several issues should be considered:

- A major objective of this price cap regulation is to provide appropriate incentives to Telstra to seek cost productive efficiency improvements—suggesting that a longer, rather than shorter, price cap period would be preferable.
- A longer price cap period will reduce the regulatory burden and uncertainty associated with a shorter price cap period.
- A risk associated with longer price cap periods is that market conditions may change such that the price control arrangements are too far removed from the prevailing conditions due to e.g. impacts of new and emerging technologies, changes to underlying cost conditions, changes in the competitiveness of services.

Given the above factors and the ACCC's views on new and emerging technologies outlined in chapter 8, the ACCC recommends that no departure from the current price control duration of three years should be retained.

5.5 Complementary arrangements

The ACCC is required to consider whether any other complementary arrangements are required to complement the future price controls and, if so, their nature.

In the draft report, the ACCC considered the need for arrangements relating to declaration of line rental, access pricing for core services generally, investment incentives and alternative low-income package arrangements.

5.5.1 Views of interested parties

AAPT (p. 4), Hutchison (p. 5) and Optus (pp. 11–14) argued that bundling of price-capped services with services supplied in more competitive markets will have anti-competitive consequences. Optus and AAPT argued that constraining Telstra’s market power by price control arrangements in some markets would provide greater incentives for Telstra to leverage this power into more competitive markets—although this incentive could be dampened by properly targeted price controls.

AAPT argued in its submission to the discussion paper that limitations should be placed on Telstra’s ability to bundle products (pp. 9–10).

In submissions to the discussion paper, competing service providers submitted that the ACCC should consider altering the current approach to access regulation. Support was strong among competing fixed-line service providers for the declaration of a wholesale line rental product (CCC p. 3) or for the price of access to this service to be regulated through other means, such as via LCS (AAPT p. 11; Optus p. 30). ATUG also recommended regulation of wholesale access prices for line rental. Parties also made recommendations about the ACCC’s indicative prices for PSTN O/T, LCS and ULLS core services (ATUG p. 6; Optus, pp. 23-24).

The Australian Consumers’ Association submitted to the discussion paper that Telstra should be required to charge competitors the same as it implicitly charged its own retail operations, and if this was done the price control arrangements could be restricted to pricing wholesale services (p. 2).

ATUG suggested in its submission to the discussion paper that carrier licence and spectrum fees should be reduced especially within non-metropolitan areas (p. 7). In its submission to the discussion paper, Optus considered that the USO should be abandoned as it impedes investment by competing service providers in non-metropolitan areas (p. 9).

A USO-style industry fund was suggested as an alternative means by which to deliver the low-income package or other initiatives targeting potentially disadvantaged consumers (AAPT, p. 2).

5.5.2 Views of the ACCC

Measures to promote efficient investment in competing services

The ACCC considers that initiatives to promote efficient investment by competing service providers in non-metropolitan areas are beneficial, and considers that regulation under the TPA can assist in promoting such investment. This regulation would include scrutiny of bundling practices and other price elements, particularly in areas where competitive investment in facilities is proceeding.

That said, amendments to the TPA could improve the efficacy of regulation. For instance, it can be noted that under Division 4 of Part XIB of the TPA—which deals with tariff filing directions—the ACCC may not insist upon more than seven days notice being given of a proposed change in a tariff. A period of seven days notice is insufficient to allow proposed prices or associated terms and conditions to be assessed and action taken on any elements that are considered to be anti-competitive.

Accordingly, the ACCC would recommend that consideration be given to amending to the tariff-filing provisions of Division 4 of Part XIB of the TPA. Constructive changes would include increasing the period of notice from seven days to 15-20 days, amending the substantial market power threshold for tariff-filing directions, allowing for non-price information to also be obtained, and requiring the period of notice to be in advance of proposed tariffs being made public, rather than when they take effect.

As competition in non-metropolitan areas is relatively weak, efficient investment in services supplied to these areas would be particularly beneficial. Australian Communications Authority initiatives—in reducing licensing charges to benefit smaller carriers⁷⁵ and approving a frequency band plan that aims to increase opportunities for broadband wireless access deployment in regional and remote areas⁷⁶—would also be expected to promote investment in non-metropolitan areas. While amendments to the USO scheme have been raised in this inquiry, the ACCC understands that the USO scheme is currently under review and that those concerns have been raised in that inquiry.

Measures to promote access-based competition

The ACCC considers that price control arrangements that apply to the basic telecommunication product consisting only of line rental and local calls will provide sufficient certainty to competing service providers as to the prices they would be likely to face for acquiring wholesale line rental services from Telstra. That said, the ACCC may still consider in future whether to declare a wholesale line rental service.

The ACCC notes the concern that has been expressed over indicative pricing of the local carriage service ('LCS'). As previously acknowledged, the ACCC considers that under the pricing construct used in setting indicative pricing for the LCS, Telstra could *potentially* price squeeze its competitors.⁷⁷ While the ACCC recently accepted an access undertaking for the LCS core services that would operate for 6 months⁷⁸, the ACCC intends to fully investigate this concern in the course of its pending review of the LCS declaration and associated pricing principles.

Similarly, the ACCC would intend to consider the issues that have been raised in respect of the other core services in reviewing the relevant declarations.

Alternative mechanisms by which to deliver the low-income package

⁷⁵ ACA, *ACA reduces carrier licence charges*, media release, 28 June 2004.

⁷⁶ ACA, *Plans to Improve Regional and Remote Broadband Approved by ACA*, media release, 20 December 2004.

⁷⁷ ACCC, *Final Determination for Model Price Terms and Conditions of the PSTN, ULLS, and LCS Services*, October 2003, p.92, ACCC, *Assessment of Telstra's undertakings for PSTN, ULLS and LCS—Final Decision*, December 2004, p. 36.

⁷⁸ ACCC, *Assessment of Telstra's undertakings for PSTN, ULLS and LCS—Final Decision*, December 2004.

The ACCC considers that the low-income package specified under the price control arrangements is an appropriate mechanism by which to deliver targeted assistance to low-income consumers. In the longer term, further consideration could be given to how the net cost of the low-income package is funded, including whether a USO style fund is required. At this time, the ACCC does not consider industry funding of the low-income package to be essential given its targeted nature and the limited impact it has on Telstra's net revenues.

Bundling of telecommunications services

While the ACCC notes the concerns of competitive carriers arising from bundling, the consequences for competition of particular bundling practices depend upon the nature of the bundled offer and the prevailing market conditions. As such, the ACCC has not sought to curtail bundling generally but has continued to monitor bundling practices—in particular, the bundling of pay television services with the price-capped services.

Additional measures to protect non-metropolitan consumers

Reflecting that non-metropolitan consumers are less likely to benefit directly from competition, a number of initiatives have been put in place to ensure that benefits of competition are made available to non-metropolitan consumers—the price control arrangements require that local call prices offered to metropolitan and non-metropolitan consumers generally align, and government subsidies ensure that customers in extended zones pay less for certain calls.

Notwithstanding these initiatives, the NATSEM analysis of expenditures on Telstra telephone services (Confidential Attachment D) shows that non-metropolitan consumers are still spending more than metropolitan consumers for the price-capped services. This disparity in expenditures is due to much higher spending on national long-distance calls by non-metropolitan consumers and would appear to reflect the greater number of national long-distance calls made by non-metropolitan customers.

As such, the ACCC considers that further consideration should be given to additional measures—outside the price control arrangements—to better ensure that non-metropolitan consumers are able to enjoy the benefits of competition until such time as competition develops in non-metropolitan areas. The ACCC considers that this should include investigating the reasonableness of using Telstra's call charging areas in order to classify calls made by non-metropolitan consumers as national long-distance calls.

5.6 Mechanisms for assessing and enforcing compliance

The ACCC is directed to consider mechanisms for assessing and enforcing compliance with the price control arrangements.

In the draft report, the ACCC recommended the strengthening of the current arrangements for assessing and enforcing compliance, including approval of line rental price changes before implementation, making carry-over credits conditional on compliance, and the development of more robust information systems.

5.6.1 Views of interested parties

AAPT (pp. 4–5) and Optus (p. 11–14) considered that the price control arrangements should be structured to ensure that they are not circumvented through bundled service offerings. AAPT considered that this should be done either by specifying that discounts given on price-capped services should be disregarded in measuring price movements, or that otherwise price movements should in those circumstances be calculated in accordance with a direction given by the ACCC.

Telstra responded that the proposed measures to better ensure that its line rental pricing decisions were likely to be consistent with the price control arrangements were not necessary (p. 10).

5.6.2 Views of the ACCC

The ACCC considers that better mechanisms should be implemented for assessing and enforcing compliance such that the benefits envisaged by the price control arrangements would be realised. The ACCC recommends that the following initiatives are included in future price control arrangements:

- proposed line rental price increases are assessed by the ACCC prior to implementation to better ensure that they will not lead to the price control arrangements being breached
- allowance and quantification of carry-over credits are made conditional on Telstra's compliance with the objectives of the price control arrangements and on the provision of timely information necessary to assess compliance
- compliance systems discourage over-charging, and any over-charging that does occur is to be repaid in the following period
- in quantifying price movements in the price controlled products, the treatment of bundling discounts should be in accordance with ACCC guidance.

The first recommendation is made due to Telstra's practice of adopting contentious methods for calculating price movements in the line rental service without consulting the ACCC and increasing prices to exercise the resultant apparent loosening of the price cap.

There have been two such instances that have been identified:

- in reporting the 2001–02 price movement for the line rental service, Telstra substituted for actual demand data values that it considered more consistent with its line rental revenues—resulting in Telstra reporting a price movement that was three percentage points below what would have been reported had actual data been used
- in reporting the 2002–03 and 2003–04 price movement for the line rental service, Telstra attributed pensioner discounts that are conditional on the purchase of call services to the line rental service—the amount by which this resulted in lesser price movements is not known, but was estimated at around four percentage points.

In these circumstances, in particular, the ACCC considers that assessment of Telstra's projections are necessary to better ensure that price changes to the line rental service would not cause the price controls to be breached. This would require Telstra providing details of how it intends to treat individual revenue, discount and demand items, the data and assumptions upon which forecasts have been made, and the information systems upon which those data have been obtained.

The ACCC does not consider that this form of regulation would be intrusive, as it would entail relatively high level oversight of modelling that Telstra would need to undertake for internal compliance purposes. Nor does the ACCC consider that this regulation would expose it to public or political pressure.

The second recommendation is made to better encourage Telstra to comply with the spirit as well as the letter of the price control arrangements by making clear that it will not be able to retain any credits that:

- would otherwise accrue as a result of practices that compromise the efficacy of the price control arrangements
- that could in practice accrue should compliance be assessed on incomplete information.

The ACCC has experienced considerable difficulty in obtaining information that is necessary to assess compliance. Telstra has refused to supply elements of the reports that the ACCC has formally specified under the existing price control arrangements.

This regrettably leads to delays in the ACCC reporting on the adequacy of Telstra's compliance. In the absence of the next price control arrangements providing greater incentives, there is little basis to believe that Telstra's attitudes will change and that the ACCC will be able to report within more appropriate timeframes.

Under this approach, carry-over credits would be notified by the Minister after receiving the ACCC's report on the adequacy of Telstra's compliance. As well as encouraging Telstra to provide complete and timely information, an annual specification of carry-over credit will also provide certainty as to the price cap that is to apply.

The third recommendation is made because it would be impractical to compensate individual consumers for any contraventions that may occur other than by crediting their accounts or reducing prices paid on an ongoing basis. While the current price control arrangements contain provisions that go some way towards this, the next price control arrangements should expressly provide a mechanism by which consumers receive redress for a contravention of any of the price-caps.

The fourth recommendation is made to provide the ACCC with a reserve power to ensure that bundling discounts are not used to circumvent the intent of the price control arrangements. For instance, Telstra T-Time rewards programmes provide discounts on

price-capped services—in particular, local calls or fixed-to-mobile calls—when price-capped services are bundled with mobile, internet or pay TV services.⁷⁹

Telstra's recent treatment of pensioner discounts that is noted above illustrates how allocating discounts given on a bundled service to a price-capped basket—in this case a sub-basket—in effect allows higher prices to be charged.

In addition to the above recommended initiatives for the price control arrangements, the ACCC considers that more robust information systems should be implemented by Telstra. This is because Telstra's existing information systems have been ill-suited to the price control arrangements and appear to be becoming less suitable.⁸⁰ These initiatives could be implemented by record-keeping rules issued by the ACCC.

The enhancements that are required are that:

- revenue and discount accounts and demand measures should be recorded for each product that is an instance of a price controlled service—this will allow for more precise price measures to be calculated that are not influenced by exogenous factors such as churn between products
- line rental demand measures should be taken from Telstra's billing systems rather than estimated from service connection and disconnection data.⁸¹

While the scope of price control arrangements, the complexity of Telstra's tariffs and Telstra's relatively less aggressive approach to exercising price caps have previously militated against making these improvements, the ACCC now considers that it is both necessary and feasible to make them. Feasibility has been assisted by rationalisation of Telstra's standard tariffs, excluding supply to larger business customers from the price caps and the price caps remaining limited to connections, line rentals and call services.

⁷⁹ See Telstra, 'Telstra Reward Options', accessed 20 January 2004, <www.telstra.com.au/rewardoptions/t_time.htm>.

⁸⁰ In 2003–04, Telstra reconfigured its information systems such that revenue, discount and demand data for local calls could no longer be aligned to metropolitan and non-metropolitan areas, necessitating the second best option of sampling to assess compliance with the geographic price relativities.

⁸¹ See Telstra, *Telstra Corporation Limited 03/04 Third Quarter Market Update*, 21 April 2004, footnote (v) page 10.

6 Impact of current and future price control arrangements

This chapter reviews the impact of the current price control arrangements, and possible future price control arrangements, on:

- competition and the future development of competition, having regard in particular to the telecommunications anti-competitive conduct regime and telecommunications access regime under Parts XIB and XIC of the TPA
- the availability, choice, quality and prices of services to consumers and any other impacts on consumers
- the telecommunications industry, including on economically efficient investment decisions.

6.1 Key elements of current price control arrangements

The ACCC believes that there are five key elements of the current price control arrangements that had implications for competition, consumers and the telecommunications industry:

- rebalancing
- allowing ‘carry-in’ credits into the price control period
- measures aimed at improving investment incentives
- pass through of anticipated productivity improvements—the ‘X’ factor
- measures to protect potentially disadvantaged consumers.

6.1.1 Rebalancing

Rebalancing is the process by which the price of line rental was permitted to increase and the prices of calls required to decrease so that both line rental prices and call prices were more closely aligned with the underlying cost of providing the service.

6.1.2 Carry-in of credits into the price control period

The current price control arrangements allowed Telstra ‘carry-in credits’ from the previous price control period. Where the aggregated price movements for component services out-performed the movements required under the previous price control arrangements, Telstra accumulated ‘credits’ equal to the amount that it out-performed the cap. Telstra was able to ‘carry-in’ the credits into the current price control period,

increasing the price caps by the amount of the credits.⁸² As a result, for example, Telstra carried-in 7.4 percentage points as a credit for the basket of call services from the previous price control period.

While it could be argued that previous price restraint should be taken into account, the ACCC considers that price targets should be set on a forward-looking basis and not on the basis of price targets that may have been set too high or too low in previous periods. On a forward-looking basis, the effect of allowing carry-in credits from earlier price control periods is to dilute the pass-through of productivity improvements that are reasonably anticipated for the period.

Accordingly, the ACCC recommends that the future price control arrangements should not allow carry-in credits from the current price control period.

6.1.3 Measures aimed at improving investment incentives

Where there has been a change in the quality of service or in the provision of service, the current price control arrangements allow the ACCC to determine that the price charged for a service should be taken to have increased or decreased as compared to the price actually charged. While the provisions provide some incentives for Telstra to provide price-controlled services to a higher standard, they are of limited utility in encouraging Telstra to maintain quality of service, and provide no direct incentives for other service providers to invest.

6.1.4 Anticipated productivity improvements—the ‘X’ factor

In price caps that take the form of $CPI - X$, the ‘X’ factor determines the required decrease or permissible increase in average real prices. The X factor is specified so that reasonably anticipated productivity improvements are passed on to consumers as lower prices.

The current price control arrangements specified price caps of $CPI + 4$ per cent for all line rental services, of $CPI - 4.5$ per cent for call services and of $CPI - 0$ for connections. The revenue-weighted price cap across both line rental and call services was $CPI - 1.5$ per cent.⁸³ The ACCC had recommended setting a price cap of around $CPI - 5$ per cent.

As discussed in Attachment A, the ACCC estimates that Telstra’s productivity improvements over the period 2000–04 specific to line rentals and calls has been growing, and Telstra’s RAF reports show this to be at an average rate of 8.3 per cent. If

⁸² As the price-capped services did not align, certain adjustments were made in an effort to make the carry-in credit representative of the services that were included in the first basket consisting of calls, but not in the second basket consisting of line rentals.

⁸³ This is calculated by weighting each X by the revenue derived from the services within the respective baskets. For 2002–03, ignoring connections, this gives $X = 0.65 \times 4.5\% + 0.35 \times -4.0\% = 1.5\%$, leading to an effective cap of $CPI - 1.5\%$.

so, this means that productivity improvements actually experienced would have been sufficient to sustain a price cap of around CPI – 7.3 per cent.⁸⁴

6.1.5 Measures to protect potentially disadvantaged consumers

The current price control arrangements provide some protection for low-income consumers through a package of targeted services and arrangements. While the fundamental premise of the package is sound and has delivered some important benefits for low-income consumers, there are ways to strengthen the package so that low-income consumers can use basic telephone services at a level closer to that enjoyed by other Australians. The low-income package is discussed in chapter 9.

6.2 Impact of key elements on baskets of services

6.2.1 Line rental

Views of interested parties on the effect of the current arrangements

A number of submissions expressed the view that line rental rebalancing is essentially complete (AAPT p. 3, Australian Consumers' Association p. 1, CCC p. 2). Similar views were expressed in submissions to the discussion paper (ATUG p. 3, Optus p. 9).

In the Sydney public meeting Ms Rosemary Sinclair, ATUG, directly asked Telstra whether it considers that rebalancing is completed. Mr Bill Scales, Telstra, responded that Telstra was close to rebalanced. Mr Scales also said that Telstra was not sure whether further line rental increases were feasible given the competition in the market and that competition would determine the extent to which any prices adjust.

In both public meetings and submissions, consumers argued that rebalancing had been detrimental to the general public. Participants in the Adelaide meeting generally complained that line rental costs too much. Mr Carter argued that rebalancing has been a disaster and has resulted in higher costs for residential consumers for both line rental and local calls (p. 3).

The Australian Consumers' Association and CTN argued at public meetings that the benefits of rebalancing have not gone to all consumers, with low-usage customers relatively worse off due to the higher fixed monthly line costs. Telstra argued in response at the meetings that the availability of HomeLine Budget, with its lower line rental, should mitigate such problems.

The Australian Consumers' Association also submitted that the increasing price of line rental under rebalancing was forcing certain consumers to use prepaid mobile phones instead of a fixed line service, due to the lower upfront costs (p. 1).

Optus argued that the current price control regime had resulted in distorted competition, saying that pricing line rental below cost had affected the incentives for facilities-based

⁸⁴ Economy-wide productivity improvement, of around one per cent, is deducted from the 8.3 per cent productivity improvement for the price-controlled services to give an X of 7.3.

competition (p. 16). However, it also said that resale competition had allowed significant churn in customers away from Telstra (p. 7). Optus also argued in its submission to the discussion paper that Telstra effectively set the market retail price for line rental, and that matching Telstra's below-cost pricing made it difficult to achieve a reasonable rate of return (p. 10).

Views of the ACCC

Competition and future development of competition

The CPI + 4 per cent price cap on line rental allowed Telstra to increase its line rental prices towards cost. As such, although competition for line rental services has been weak over the current price control period, the ACCC considers that the current price control arrangements have promoted the development of competition.

The consensus arising from submissions and public meetings is that Telstra can now recover, or will be close to recovering by the end of the current price control period, all of its efficiently-incurred costs of supplying line rental from line rental prices.

Competition is considered more likely when line rental prices have increased to around the cost of supply. This is because competing service providers that are as efficient as Telstra can invest in their own infrastructure and thereby introduce greater competition. The ACCC notes recent pricing initiatives by Optus to supply line rentals in its off-net areas and Telstra's comments noted above that it considers it will be more constrained in future in its own pricing by competing service offerings.

Availability, choice, quality & prices of services to consumers and any other impacts on consumers

The ACCC's *Telstra's compliance with price control arrangements* report shows that Telstra's line rental prices overall increased by 8.4 per cent over 2002–03.⁸⁵ The ACCC understands that similar price movements have continued in 2003–04. That report does not disaggregate the price movements between customer groups. However, as noted in section 4.2, increases in line rental prices in the market generally have been much larger for residential and small business customers than for other business customers.⁸⁶ As Optus noted, Telstra is likely to effectively set the market price for line rental, meaning that the greater increases for residential and small business consumers across the market would be indicative of changes in Telstra's pricing.

The Australian Communications Authority's *Consumer Satisfaction Survey 2004* indicated that the majority of consumers consider that line rental prices are too high. In particular, 67 per cent of household respondents and 65 per cent of small business

⁸⁵ The price increase reported in the ACCC report was 7.2 per cent reflecting an allowance made in respect of quality improvements made to the service in that year. Refer ACCC, *Telstra's Compliance with the Price Control Arrangements 2002-03*, May 2004, p. 162.

⁸⁶ For example, ACCC, *Changes in prices paid for telecommunications services in Australia 2002-03*, May 2004, shows that over 2002-03, line rental prices for residential users increased by 16.6 per cent, prices for small business by 7.5 per cent and prices for other business by 0.6 per cent.

respondents considered the price they paid for line rental was too high.⁸⁷ This may indicate that line rental prices have increased to the extent that they are out of line with community expectations. This view also seemed to be reflected in the public meetings.

This could perhaps have been partly avoided by requiring rebalancing for residential consumers over a longer period or by specifying the price control arrangements such that a discrete price target was set for line rentals supplied to residential customers.

As a guide to the price changes that have occurred in residential line rentals, the following table sets out the price increases for the HomeLine Complete line rental product from 2000 to 2004.

Table 6.1 Residential line rental increases—HomeLine Complete

Date	From	To	Change
1 March 2000	\$11.65 (GST excl)	\$13.85 (GST excl)	18.9%
1 July 2000		\$15.24 (GST incl.)	10%
1 February 2001	\$15.24	\$17.50	14.8%
1 September 2001	\$17.50	\$19.90	13.7%
1 August 2002	\$19.90	\$21.90	10.1%
1 July 2003	\$21.90	\$23.50	7.3%
1 June 2004	\$23.50	\$26.95	14.7%

NATSEM’s report (confidential attachment D) finds that there were increases of [c-i-c] per cent in residential customer expenditure on line rental per service-in-operation in the period from October 2000 to June 2004. This indicates that similar price increases to the HomeLine Complete product were made for the overall line rental service supplied to residential consumers.

Business line rental prices have not increased as much as residential prices. From 1 July 2002 to the present, *HomeLine Complete* charges have risen 35.4 per cent from \$19.90 to \$26.95. *HomeLine Plus* charges have risen 36.8 per cent from \$21.90 to \$29.95. However, from 1 July 2002 to the present, *BusinessLine Complete* charges have risen 9.4 per cent \$31.95 to \$34.95. *BusinessLine Plus* charges have risen 10.8 per cent from \$36.95 to \$40.95.

At the time of the 2001 review, the price of line rental for business customers was much closer to the efficient underlying cost of the service than was the price of line rental for residential customers. In the ACCC’s final report for that review, the ACCC estimated that the average annual efficient line cost (2000–01) was \$346. At that time, Telstra’s annual charges for line rental were \$210 (GST incl.) for residential customers and \$330 (GST incl.) for business customers. As such, the greater rise in the price of residential line rentals would seem consistent with aligning prices to cost.

HomeLine Budget would have permitted some residential consumers to access cheaper line rental. However, the product would have only been a viable option for those consumers that do not make many calls. The ACCC also notes that the low-income

⁸⁷ ACA, *Consumer Satisfaction Survey 2004*, Special Report No. 14, August 2004, p. 10.

package has provided some protection for some low-income consumers from the increased line rental under rebalancing. This is discussed further in chapter 9.

Telecommunications industry, including the economically efficient investment decisions

While there is consensus that the line rental price is now close to or equal to cost, it seems likely that price has been under the efficient cost of supply for at least some of the current price control period. It is possible that this has discouraged investment by Telstra or other service providers that would have been economically efficient.

However, it is also true that line rental has natural monopoly characteristics that may mean extensive investment in a second basic access service would have been unlikely anyway. A further limiting factor may have been the recent limited appetite of capital markets for telecommunications investments.

Investment in other services may have also been affected by the price of line rental being below cost. This is because the prices of other services will generally need to be set above cost to ensure that total revenues are sufficient to cover total cost.⁸⁸ This can distort consumption and investment signals across all services, and depending on the magnitude, may distort final consumption and investment decisions.

The current price control arrangements have addressed this in two ways:

- by permitting rebalancing so that line rental prices approximate the cost of providing the line rental service
- by allowing the deeming of price reductions to have occurred where investments that improve quality have been made.

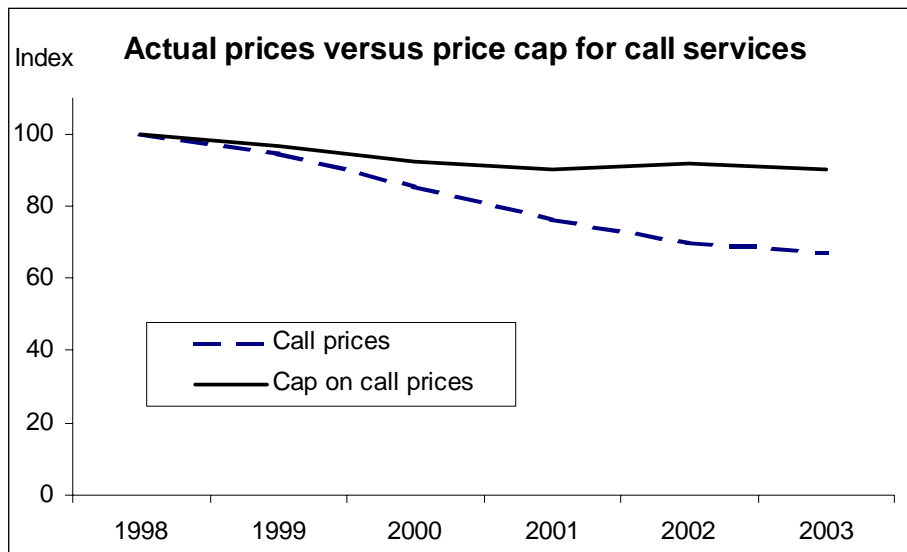
6.2.2 Call services basket

Views of interested parties on the effect of the current arrangements

Optus' submission to the discussion paper charted the aggregate price of calls against that required by the current price caps. Optus considered that Telstra does not have unfettered market power in the markets for domestic and international long-distance and fixed-to-mobile calls and that competitive forces have pushed the prices lower than required by the price control regime. As a result, Optus argued that the CPI – 4.5 per cent price cap on call services is largely redundant (p. 10).

⁸⁸ An exception might be if Telstra was compensated by an external source such as direct government subsidies or contributions from other operators.

Figure 6.1 Optus' chart on price movements versus price control pathway⁸⁹



Mr Roger Joseph, representing Mr Harry Quick, MP, noted in the Hobart meeting that constituents do not consider that lower call charges have been sufficient to offset increases in line rental.

Views of the ACCC

Telstra reports that the revenue-weighted average price movements for the call services basket was a decrease of 1.3 per cent for 2002–03.⁹⁰ The ACCC understands that similar overall price movements for this basket have continued.

As CPI has been around 3 per cent, it can be noted from this that the average price movement for the basket of services has been in line with the annual price reductions that were specified in the current price control arrangements. That is, they represent reductions of around 4.5 per cent in real terms.

However, the ACCC notes that because Telstra brought in significant carry-in credits to the current price control period, the constraint imposed by the call services price cap was effectively diluted. One consequence of this is that there was no regulatory obligation on Telstra to ensure that consumers would experience price reductions that were sufficient to compensate them for rising line rental charges.

Further, while the current price-control arrangements are probably sufficient to ensure that an average consumer will pay less in real terms for line rental and local calls,⁹¹

⁸⁹ Optus, *Optus Submission to ACCC on Review of Price Control Arrangements*, August 2004, p. 11.

⁹⁰ ACCC, *Telstra's Compliance with the Price Control Arrangements 2002-03*, 31 May 2004. In that basket, average local call price actually increased by 1.2 per cent, international long-distance call price decreased by 2.6 per cent and trunk calls, consisting of domestic long-distance and fixed-to-mobile calls, price decreased by 2.4 per cent.

⁹¹ On a weighted average basis, the average price for line rental and calls reduced in real terms in 2002-03.

average price movements can mask divergent prices for different classes of consumers. As discussed in chapter 7, the current price control arrangements have not operated to ensure that, overall, residential consumers have paid less in real terms for price-controlled services.

In order for this price cap to have more directly influenced price movements for calls, and to better ensure that price reductions were more likely to compensate for line rental price increases for a wider class of consumers, the ACCC considers that:

- the ‘X’ factor should have been more informed by reasonably anticipated productivity improvements for the price-controlled services
- carry-in should not have been permitted from the previous price control period.

6.3 Likely impact of possible future price control arrangements

This report suggests the following future price control arrangements:

- placing line rental and price-controlled call services in one broad-based basket with a price target that passes on productivity improvements as lower real prices—this requires an ‘X’ informed by reasonably anticipated productivity improvements and not allowing carry-in credits from the current price-control period
- excluding services supplied to business customers with more than five lines from the basket
- a price cap on Telstra’s basic telephone products containing line rental and local calls only—currently branded HomeLine Part and BusinessLine Part
- pass-through of efficient costs of investment (including a normal commercial return on investment) to improve service quality or the reduction of carry-over credits where quality of service deteriorates
- measures to better protect low-income consumers (considered in chapter 9)
- measures to improve the robustness of the regulatory regime.

Views of interested parties

The Australian Consumers Association (p. 1) and Virgin (p. 3) argued that the absence of a specific cap on FTM prices would mean that consumers would not be ensured of the lower prices for FTM calls that the ACCC expected from its recent *Mobile terminating access service final decision*. Hutchison (p. 3) argued that the absence of a specific FTM cap would deliver a windfall to Telstra and would allow anti-competitive cross-subsidisation.

AAPT argued that a price cap on HomeLine Part and BusinessLine Part would be preferable to a cap on line rental generally as it would help to avoid possible anti-competitive price squeeze (p. 4). Optus also argued that capping the price of HomeLine

Part would ensure that basic line rental prices are not inflated, allowing competition from other carriers who combine HomeLine Part with their own preselect calling services (p. 16).

CCC argued that limiting any further rebalancing would help to avoid cross-subsidisation between line rental and call services (p. 2), and that excluding business services from the price controls would likewise prevent cross-subsidisation between residential and business services (p. 3).

Comparatively, both Telstra (p. 5) and Optus (p.9) submitted that the exclusion of business services would reduce pricing flexibility, damage efficiency incentives in the industry and be harmful to consumers and the industry.

Telstra and Optus also argued that the 5 per cent 'X' factor for the price cap proposed in the draft report would have negative effects on the industry. Telstra argued that it would have major financial implications for both Telstra and the industry (p. 6), while Optus argued that it would damage investment incentives by forcing prices lower, possibly below cost, and therefore raising barriers to entry (p. 8).

Telstra also argued that the ACCC's proposed value claim methodology would not provide the right incentives for investment in quality of service improvements (p. 11) and that carry-in credits should be allowed (p. 9).

6.3.1 Competition and future development of competition

The ACCC considers that the proposed price cap arrangements will promote competition by:

- giving competing service providers greater certainty over the price of wholesale line rental, to better ensure that access-based competition continues to evolve where competitive infrastructure investment is not feasible
- not eradicating margins that currently exist on fixed line phone services, as price targets will be consistent with reasonably forecast productivity improvements. In this regard, the ACCC has revised its recommended X to 4 per cent per year.

That said, the ACCC considers that competition is unlikely to develop for services supplied to low-income consumers and will likely, in the short term, increase to a relatively lesser extent in non-metropolitan areas compared to metropolitan areas.

The ACCC also intends to examine the issue of facilities-based competition being foreclosed by anti-competitive practices. This should assist in promoting facilities-based competition although it would be enacted separately from the price control regime.

6.3.2 Availability, choice, quality and prices of services to consumers and any other impacts on consumers

The proposed broad price cap of CPI – 4 per cent on services to residential consumers and businesses with five lines or less would lead to lower average prices for fixed line phone services. This cap, in combination with not allowing carry-in credits from the

current price control arrangements, should better ensure that consumers share in Telstra's reasonably forecast productivity improvements in the form of lower prices.

While Telstra will have flexibility in how it prices services within the basket, the ACCC anticipates that the price of FTM calls, as well as the price of other calls, will decrease in real terms as a result of the proposed price cap.

Distributional effects

Quantitative analysis of the economic costs and benefits of the future price control arrangements on different classes of consumers is presented in chapter 7. It is likely that some consumers will still benefit more, and some less, from initiatives to improve availability, choice, quality and price of services than the average consumer. Additionally, some consumers may still face price increases for the price-capped services, depending on the level of X that is specified.

That said, the ACCC considers that price movements for the price-capped services will be less divergent for different classes in future, as large business customers will be outside the cap. The ACCC also considers that additional price control measures directed towards mandating similar costs and benefits across all consumers would come at significant costs to economic efficiency. Should distributional issues be a concern, other initiatives outside the price control arrangements could be considered to achieve these objectives more directly without efficiency costs.

Line rental prices

The ACCC has recommended that line rental prices be constrained by a CPI price cap on the HomeLine Part and BusinessLine Part products, and anticipates that this will keep line rental prices from increasing significantly. The ACCC also expects that any further increase in line rental prices would not be detrimental to consumers. This is because:

- the broad CPI – 4 per cent price cap means that, on average, consumers would face lower prices overall for fixed line telephone services even if line rental prices continue to rise, and a wider class of consumers distributed around this average would pay less in real terms than is currently the case⁹²
- excluding business customers with more than five lines from the price caps should ensure that associated benefits and costs arising from line rental price changes are more evenly distributed between classes of customers than in the current price control period
- to the extent that price rises keep the price of line rental aligned to cost, this will promote more efficient pricing meaning that, on average, consumers will be better off across the range of services
- the price controls on HomeLine Part and BusinessLine Part would limit any further line rental price increases by encouraging Telstra or other service providers to offer

⁹² The current price cap across these services is effectively around CPI–1.5 per cent.

a greater range of line rental and call plans that appeal to more consumers with different call requirements

- the cap on HomeLine Part and BusinessLine Part would also increase prospects that consumers worse off due to any line rental increase could change to a competing service provider with a more suitable plan
- low-income consumers could be protected from the effects of any further line rental increases through the low-income package.

Quality of service

The proposed future price-control arrangements are likely to encourage Telstra to provide a better quality of service by:

- permitting the pass-through of efficiently-incurred costs, including a return on capital, of investments that improve quality
- introducing deemed price increases for a deterioration in service quality to better ensure that service quality is maintained.

Robustness of the regulatory regime

The measures that the ACCC has proposed for better ensuring that the price caps will not be breached, and to discourage conduct aimed at avoiding their effect, would better ensure that the benefits discussed above are in fact realised and any costs minimised.

6.3.3 Telecommunications industry, including the economically efficient investment decisions

The proposed price-control arrangements seek to encourage economically efficient investment by providing appropriate incentives to Telstra to invest—especially in regions where facilities-based competition remains unfeasible—by allowing for the deeming of price reductions or increases for material quality of service improvements or reductions.

The proposed price-control arrangements are also likely to promote access-based competition. The proposed cap on HomeLine Part and BusinessLine Part will provide greater certainty around wholesale line rental. This will in turn provide greater certainty to competing service providers over the costs they will face to supply Telstra's line rental service to their customers.

The ACCC also notes that a CPI – X price cap, where the X is set in order to pass through reasonably foreseeable productivity improvements to consumers, will not decrease margins. It therefore follows that the investment decisions of carriers should not be affected in the manner suggested by Telstra and Optus.

7 Distributional benefits and costs of current and possible future arrangements

The ACCC is directed to consider the distribution of the short-term and long-term community and economic benefits and costs, including the impacts on different types of households and business customers and geographic areas, from both the current price control arrangements and possible future price control arrangements. In particular, the ACCC is directed to consider the consequences of rebalancing of line-rental and call charges.

In preparing its draft report, it was not possible for the ACCC to comment in detail on this matter due to data limitations. Telstra has since provided billing data drawn in June 2004 that allows more detailed comments to be made.

7.1 Views of interested parties

A recurring point made in submissions and public meetings was that including more competitive segments in broad baskets slackens the price cap that would otherwise apply to less competitive segments.⁹³ By implication, such price control arrangements could permit relatively worse pricing outcomes for those classes of customers who cannot access more competitive service offerings.

For example, CCC argued that the current arrangements had led to Telstra cross-subsidising the more competitive corporate market with the residential market, with ‘the direct result that residential consumers, who are the intended beneficiaries of the price control arrangements, are being denied the benefits that they should be receiving’ (p. 3).

Hutchison also submitted that residential consumers were cross-subsidising businesses generally (p. 4). It argued that changes in FTM pricing particularly showed that residential consumers, for whom FTM prices had gone up, had been comparatively worse off than businesses, who had experienced FTM price cuts (p. 3).

In its submission to the discussion paper, ATUG considered that the corporate segment of the business market has experienced much greater benefits from competition than have other customers although:

- this greater competition is not necessarily manifest in lower prices, but also in better quality of service or in other ways
- Telstra remains dominant in this market segment
- concerns remain that price of fixed-line access and fixed-to-mobile calls in this segment remains too high (p. 8 and slides 27–31).

⁹³ An example of this effect is provided by the inclusion of mobile services in previous price control baskets at a time when the price of mobile services declined significantly.

The Australian Consumers' Association submission to the discussion paper argued that low-use customers have not benefited from rebalancing of line-rental and call prices, and that future price control arrangements should require a greater proportion of price reductions to be directed at such customers (p. 4).

CTN submitted that not all consumers had benefited under the current price control regime. It submitted that the levying of late fees and other ancillary charges had been felt hardest by low-income customers (p. 4). CTN also submitted that consumers in regional and remote Australia only enjoyed very limited access to telecommunications services (p. 3).

Telstra's submission to the discussion paper argued that, although residential customers may not have benefited from price reductions of a scale experienced by business customers, they would still have benefited indirectly as businesses would pass through cost savings to their customers (p. 18).

7.2 Views of the ACCC

7.2.1 Classes to be considered

The ACCC considers that, in assessing distributional effects, ideally the following classes of customers should be considered—as it is understood each of these may face materially different terms of supply for the price-controlled services:

- corporate and government customers
- other business customers
- residential customers on reward programs
- pensioner customers
- other residential customers
- metropolitan customers
- non-metropolitan customers.

However, data limitations mean that the effect of price control arrangements on all of these groups cannot be readily quantified.

7.2.2 Effect of current price control arrangements and possible future price control arrangements

Methodology

The ACCC has assessed the distributional effects of the current and possible future price control arrangements by considering changing expenditure patterns that have been observed approximate to the period of the current price arrangements, or would be expected to occur in future. While changing expenditures may be due to changes in

prices or changes in underlying demand, the ACCC considers that expenditures can give an indication of the distributional effect of price control arrangements.

The ACCC engaged the National Centre for Social and Economic Modelling (NATSEM) to derive expenditure profiles for different groups of customers from the June 2004 billing records that Telstra supplied. The following expenditure profiles were derived:

- residential customers
- business customers⁹⁴
- metropolitan customers
- non-metropolitan customers.⁹⁵

In addition, a series of discrete profiles were derived for customers within the above groups, as follows:

- for residential customers, and for business customers respectively, customers by call expenditure quintile
- for metropolitan and non-metropolitan customers respectively, residential customers and business customers.

The residential customer expenditure profiles were then compared to similar profiles derived from billing records that Telstra supplied in October 2000. This was to illustrate the broad effect of the current price control arrangements on residential expenditures.

Future expenditure profiles were then estimated, having regard to broad movements in average prices that the ACCC would anticipate under possible future price control arrangements

NATSEM's report is provided as confidential attachment D.

Effect of current price control arrangements

The following effects have been considered:

- the effect of the price controls on overall residential expenditures
- the effect of rebalancing

⁹⁴ Residential and business customer groups were aggregated by reference to billing codes assigned by Telstra

⁹⁵ Metropolitan and non-metropolitan customer groups were aggregated by reference to the billing post code.

- the effect of local call relativities

The effect of the price control arrangements on overall residential expenditures

An indication of the overall distributional effect of the current price control arrangements on residential customers can be obtained by comparing their expenditures prior to the commencement of those arrangements to their expenditures at their conclusion.

The following should be considered when interpreting the changes in expenditure:

- Due to data limitations and the need to undertake this analysis before the end of the current price control arrangements, this analysis has been undertaken by comparing expenditures as at October 2000 to those as at June 2004—the current price control period is from July 2002 to June 2005.
- Not all changes in expenditure will be due to price changes and hence referable to the effect of the current price control arrangements—some expenditure changes may be due to changes in demand caused by factors other than price. As such, not all increases in expenditure mean that customers are worse off—some increases may be due to new services becoming available to customers.

On the latter point, strong growth in expenditures on fixed-to-mobile calls has occurred when the average price paid by residential customers for those calls across the market has been relatively constant⁹⁶, and may be better explained by the growth in the number of mobile services over the period.

It would be expected that most of the increase in this expenditure would represent greater flexibility on the part of customers to make calls—and would indicate an increase in the value that consumers derive from the service.

That said, a small proportion of the increase in fixed-to-mobile call expenditure could be expected to be due to customers now having to call a mobile service for communications that could previously have been made to a fixed service simply because the called party did not have a fixed line service—and hence would represent a higher cost to the customer.

In June 2004 residential customers were spending substantially more on the price capped services than in October 2000. In nominal terms, residential customers' monthly expenditure has increased from [c-i-c] to [c-i-c],⁹⁷ or an increase of [c-i-c] per cent. Over the same period, the CPI increased by 10.5 per cent.

The largest growth in expenditure was for fixed-to-mobile calls, followed by line rentals. National long distance call expenditure also increased. Expenditure on

⁹⁶ ACCC, *Changes in Prices Paid for Telecommunications Services in Australia 1987-88 to 2002-03*, May 2004

⁹⁷ Expenditure data are exclusive of GST.

international long distance calls reduced slightly, while expenditure on local calls decreased more substantially.

Expenditure by non-metropolitan residential customers increased more than expenditure by metropolitan residential customers. Expenditure by non-metropolitan residential customers increased by [c-i-c] per cent compared to [c-i-c] per cent for metropolitan residential customers.

This can be explained by relatively greater increases in fixed-to-mobile and international call expenditures, and by lesser reductions in local call expenditures for non-metropolitan residential customers as compared to metropolitan residential customers. National long-distance call expenditures by non-metropolitan customers remained considerably above equivalent expenditures by metropolitan customers, with the amount spent by residential customers within each group increasing by the same amount in percentage terms. As a result, the additional amount that non-metropolitan residential customers spend compared to metropolitan customers has increased from [c-i-c] to [c-i-c] per month, or in percentage terms, from [c-i-c] per cent to [c-i-c] per cent of metropolitan monthly residential expenditures.

Rebalancing

Rebalancing is the initiative to raise the fixed pricing element faced by customers—i.e. the price of line rental—and lessen the price elements that vary with usage—i.e. call prices. It concerns the relative weight of these price elements—or *structure* of pricing—rather than the overall *level* of prices.

The current price control arrangements have permitted rebalancing to occur within certain bounds so as to reduce inefficiencies caused by substantial disparities between the cost of supplying services and their prices. These disparities had arisen due to past policies that in effect had subsidised line rental with funding from inflated call prices and, in particular, from inflated prices for trunk calls. Removing these inefficiencies while remaining revenue neutral will overall increase the welfare of customers.

The effect of rebalancing can be understood by examining who would have benefited had prices for line rentals and calls each moved in line with the movement in overall prices paid, rather than by different amounts.

That said, the effect of any tariff arrangement on particular customers or a class of customers depends upon:

- usage—other things being equal, rebalancing would benefit customers that use more call minutes per service-in-operation, especially those that use relatively more trunk call minutes
- the extent to which the particular prices that they have faced have rebalanced—average price movements for line rental and call services can mask markedly different prices for different classes of customers.

To understand the effect of rebalancing, changes in the expenditures of customers that make a relatively greater number of calls, an average number of calls and relatively fewer calls have been analysed. Customers were allocated into quintiles based upon

their expenditure on calls. Due to data limitations, the analysis was restricted to residential customers.

Between October 2000 and June 2004, there was a significant differential in growth in expenditures by the residential customer call quintiles, and there was an inverse relationship between the amount spent on calls and the change in overall expenditure.

The quintile that made the least calls has increased its overall expenditure by [c-i-c] per cent, while the quintile that made the most calls has increased its expenditure by [c-i-c] per cent. The middle quintile has increased its expenditure by [c-i-c] per cent.

The following observations can be made about the expenditures of different residential customer call quintiles in June 2004:

- The lowest residential customer call quintile spent [c-i-c] per month, of which [c-i-c] per cent was line rental. Around [c-i-c] of all call expenditure was on local calls.
- The middle residential customer call quintile spent [c-i-c] per month, of which [c-i-c] per cent was line rental. Around [c-i-c] of all call expenditure was on local calls.
- The highest residential customer call quintile spent [c-i-c] per month, of which [c-i-c] per cent was line rental. Call expenditures were directed more to fixed-to-mobile calls and national long distance calls than local calls.

An analysis was undertaken of the constituents of the residential customer low calling and high calling quintiles. This showed that non-metropolitan customers appeared more likely to be in higher calling quintiles, while metropolitan consumers appeared more likely to be in lower calling quintiles.

In June 2004, metropolitan customers represented [c-i-c] per cent and [c-i-c] per cent respectively of the low calling quintile and high calling quintile constructed from total customers—not just residential customers. By way of comparison, metropolitan customers comprised 59 per cent across the entire sample.

A separate analysis was undertaken to better assess how customers of different incomes—using median income per postcode as reported by the Australian Taxation Office—were distributed within the residential call quintiles. This analysis indicated that in June 2004 there was no discernible link between call expenditure and income. That is, low-income and high-income customers would each be as likely to be within the high-calling quintile as in the low-calling quintile.

While the ACCC in its draft report presented some tentative views on the effect of rebalancing on further customer sub-groupings—pensioners, residential customers on rewards packages, and business customers—data necessary to quantify this effect on those groupings are not available. Hence, the discussion of the distributional impacts of price control changes on these groups of customers remains, by necessity, qualitative in nature.

It could be reasonably expected that business customers would have been more likely to have benefited from rebalancing relative to residential customers. This is because:

- it is understood that business customers on average would make at least the same number of calls as residential customers per service-in-operation
- line-rental prices for business customers have increased by an amount that is significantly less than the increases experienced by residential customers
- it is understood that call prices for business customers have reduced to the same extent or slightly more than they have for residential customers.

It could be expected that pensioners and other low-income customers would have fared relatively worse than other residential users, as they make fewer calls on average than other residential customers. However, this is likely to have been ameliorated to some extent by the availability of pensioner rebates on line rentals and calls (although these rebates are not available to other low-income customers). The availability of line rental plans that are not as rebalanced as standard plans may have also helped those pensioner and low-income customers that wish to make relatively few calls.

It is less clear whether residential customers on Telstra's rewards packages would be better or worse off than other residential customers. Rewards customers are required to subscribe for more expensive line-rental products—i.e. those that have increased the most under rebalancing—and may have received a discount of around 5 per cent or 10 per cent on their calls. As such, whether those on Rewards packages are relatively better or worse off as a result of rebalancing would depend in large part on whether the number of discounted calls that they make is sufficient to compensate for higher line rentals. While rewards packages are structured to grow incremental demand, this demand may be for services other than those subject to price controls. It could not be assumed that demand for calls would be greater for these customers.

Local call relativities

In the absence of the local call relativities, it could be expected that customers in non-metropolitan areas would be charged more for local calls, and that the price charged would approach the 22 cent price cap. This is due to the relatively higher costs of supplying local calls in non-metropolitan areas and the lesser degree of competition.

Telstra has advised the ACCC of the average price paid for local calls in non-metropolitan areas in 2003-04.⁹⁸ Based on this figure, had local call relativities been removed and local call prices increased on average to the 22 cent cap in non-metropolitan areas, these customers would on average have paid around [c-i-c] cents or [c-i-c] per cent more (exclusive of GST) for local calls.

Although it is more difficult to quantify the reduction in local call prices in metropolitan areas, it could be expected that these prices would drop to some extent. The extent of any decrease would depend on:

⁹⁸ This has been derived from a sample taken from Telstra's billing systems.

- how close to the 22 cent cap average prices became in non-metropolitan areas
- the change in demand for local calls as a result of price changes
- the disparity between price and cost of supplying local calls in metropolitan areas.

Price reductions of around [c-i-c] cents per call exclusive of GST could be expected in metropolitan areas, on the simplifying assumptions:

- the 22 cent cap is reached in non-metropolitan areas
- consumption remains unchanged
- the prices in metropolitan areas decreased so that the reduction in revenues was equal to the additional revenues received from higher prices in non-metropolitan areas.

7.2.3 Effects of possible future price control arrangements

In order to assess the effects of possible future price control arrangements, it is necessary to project likely price changes under the arrangements, and calculate the resulting changes in the expenditures of different customers. The analysis is done on the simplifying assumptions that:

- demand remains constant despite changes in price
- prices faced by customer groups will move in line with changes in average prices for the service.

In order to project likely price changes, the ACCC has had regard for recent trends in pricing and price elasticity data that Telstra has made available.

The analysis assumes that line rental prices increase at around CPI, that local call prices remain static, and that trunk call prices reduce by an amount necessary to meet an overall price cap of CPI-X. Two X values—around 5 and 0—have been modelled to provide a basis of comparison and demonstrate the possible effect of different X values. It is also assumed that business customers receive relatively better pricing outcomes than residential customers.

As the analysis is directed towards the effect of possible future price control arrangements, anticipated increases in prices in the period remaining under the current price control arrangements have been excluded from the analysis.

In the scenario with an ‘X’ of 5, overall expenditures for each of the customer groups assessed—business and residential customers, and metropolitan and non-metropolitan customers—would fall. All trunk call expenditures would fall, although line rental expenditures rose slightly and local call expenditures remained steady.

In the scenario with an ‘X’ of 0, overall expenditures for residential customers—both for metropolitan and non-metropolitan customers—would increase. Overall expenditures for business customers— both for metropolitan and non-metropolitan

customers—would still decrease, although not by as much as under the previous scenario. Under this scenario, expenditure on fixed-to-mobile calls would increase for all customer groups.

Under both scenarios, non-metropolitan customers would be expected to experience slightly better outcomes compared to metropolitan customers.

It can be observed that overall expenditures for different call expenditure quintiles would be less divergent than under the current price control arrangements. Further, while total expenditures will generally increase for the lowest calling quintiles, this is expected to be by a modest amount and at a slower rate than inflation.

The effect of local call relativities

Should local call relativities be continued in the future price control arrangements, their effect will depend on factors such as:

- the price movements experienced in average local calls prices in metropolitan areas
- the demand for local calls in non-metropolitan areas.

This is because average prices in metropolitan areas provide the target price for non-metropolitan calls, and the demand in non-metropolitan areas determines the amount of revenue foregone in those areas by charging below the 22 cent cap.

As the local call market is mature, the ACCC would expect that changes in average local call prices in metropolitan areas would be relatively modest. However, as demand for local calls in non-metropolitan areas is relatively low, and domestic long-distance minutes are relatively high, there is potential that demand for local calls in non-metropolitan areas may increase as a result of extended local call zones.

Given the above, it could be anticipated that the effect of continuing the local call relativities would be similar to those experienced to date or possibly be of a slightly higher order as that noted in section 7.2.2.

8 New and emerging technologies

In conducting the inquiry, the ACCC is directed to have regard to the implications of new and emerging technologies on price control arrangements and of price control arrangements on new and emerging technologies.

To assist it in identifying relevant technologies and understanding their implications, the ACCC commissioned a report concerning new and emerging technologies from Ponderosa Communications.⁹⁹

A copy of the consultant's report is available on the ACCC's website.

8.1 Views of interested parties

8.1.1 VoIP

Voice over Internet Protocol (VoIP) or IP Telephony is a technology that can provide an alternative means by which voice communications can be sent and received.

Submissions to the discussion paper tended to focus on whether VoIP would pose a competitive threat to existing market structures and if so the extent of the threat posed. Telstra, Optus and Chime each considered that VoIP would pose a competitive threat—although Telstra and Chime indicated that the quality of VoIP services is currently below that of traditional telephony services. The Australian Consumers' Association and other parties considered that and threat posed by VoIP would be relatively weak.

In response to the draft report, Telstra submitted that VoIP has the potential to experience rapid growth over the next three years (p. 3).

8.1.2 Other technologies

In submissions to the discussion paper and in public meetings, interested parties noted the following:

- Another key technology that Telstra considers will disrupt existing markets structures and the regulatory regime is the widespread roll out of 3G mobile networks. According to Telstra, this will for the first time make wireless an effective substitute for fixed voice and data (p. 10).
- Telstra noted that new wireless technologies, such as Wi-Max, are being developed and will allow greater access to internet services than current access lines and may provide broadband and voice access to all parts of Australia (p. 7).

⁹⁹ The principal of Ponderosa Communications, Mr Peter Darling, recently chaired the working party on next generation networks that was conducted by the Australian Communications Industry Forum (ACIF).

- In terms of broadband technology, Mr Phil Tsakaros, Pacific Internet, noted in the Melbourne meeting that Telstra is putting in sub-standard or outdated broadband capabilities. As an example, it was noted that in Japan and South Korea, eight or ten Megabits per second broadband services are the standard, not 1.5 Mbps. Pacific Internet considered that it is unlikely that Telstra will make any significant upgrades to its infrastructure, and therefore consumers will not enjoy such a range of speeds over the next three years.
- ATUG considered that capital market constraints make investment in local access networks in the next three years highly unlikely (p. 6).
- Optus considered that capital markets show signs of growing appetite for new investment in telecommunications facilities and that this would most likely be in DSL infrastructure (p. 19).

8.2 Consultant report

The consultant was asked to advise on recently deployed technologies or those that can reasonably be anticipated to be commercially deployed within the next three years. Various technologies by which to provide access to telephony services were identified including cable TV networks, optical fibre networks, radio-based networks, power-line networks and satellite networks. The consultant also identified IP Telephony—a technology that provides a new method of supplying telephone calls over these new and emerging networks or more traditional networks—as particularly relevant.

The report concluded that the extent to which these technologies will be commercially deployed in the next three years will depend upon a range of factors in addition to their technical attributes, including commercial considerations and regulatory decision making. While the use of some of the technologies discussed would be unlikely to be used other than to supply niche services, others show greater prospect of commercial use to both reduce costs of existing services and to supply new or competing services.

The report noted that a key factor in determining the extent to which IP Telephony will be used to supply telephony services in competition with existing telephony services (such as PSTN services) will be the quality of the underlying broadband networks and IP applications. Unless customers can access broadband networks that are of greater quality than those that typically have been supplied to date, IP telephony will most likely be unsuitable for many customers as their primary means of accessing telephony services.

8.3 Views of the ACCC

8.3.1 Relevant technologies

The ACCC considers that only technologies that have been commercially trialled or deployed in Australia should be considered. Lead times suggest that only technologies that have been trialled are reasonably likely to be subject to widespread commercial use within the next price-control period.

The ACCC considers as relevant any such technology that would:

- lower the average costs of supply of price-controlled services or otherwise lead to productivity improvements in connection with the supply of those services, and/or
- allow new services to be supplied in competition with the price-controlled services.

As the customer access network is the main bottleneck encountered by competing service providers in supplying services in competition with the price-controlled services, technologies that permit alternative means of access are considered of particular relevance to the supply of competitive services.

In addition to new and emerging access technologies, IP Telephony is also considered of particular relevance to this inquiry due to its potential to bring material productivity improvements to price-controlled services and to disrupt existing markets.

8.3.2 Implications of new and emerging technologies on price control arrangements

New and emerging technology can have two implications on future price control arrangements:

- should it lead to productivity improvements, it will influence the price targets that should be specified for price-controlled services
- should it reduce barriers to entry or otherwise facilitate competition, it will influence the scope of services that should be price-controlled.

On the first point, Telstra has recently unveiled its future network evolution and product strategy which includes:¹⁰⁰

...an accelerated migration to packet switched network including the rollout of the most advanced IP MPLS core network as a central platform to carry voice and data traffic and support high performance business services...

In respect of possible productivity improvements, Telstra reports that:

...it expects the volume of voice traffic within its core network carried via packet technologies including IP to increase gradually over the next three to five years as additional network capacity was added and as a means of lowering operating costs.

...a rationalisation of Telstra's networks and platforms was expected to produce expense savings of \$110 million over the next two years.

....TTIP [the Telstra business unit responsible for the initiatives] has achieved a very solid cost outcome for the 2004 financial year with encouraging levels of productivity and performance in the context of this new fiscal year.¹⁰¹

¹⁰⁰ Telstra Corporation Limited, *Telstra unveils Future Network Evolution and Product Strategy*, media release, 22 July 2004.

¹⁰¹ *ibid.*

British Telecom has forecast more significant operating cost reductions from similar initiatives that it announced in 2003.¹⁰²

Other technologies in addition to use of IP telephony within the core network would be expected to bring productivity improvements. For instance, the use of more reliable radio-based access networks to service areas of more dispersed consumers (i.e. in rural and remote areas) would be likely to bring productivity improvements in servicing those customers. Due to the limited scale of such deployments, any associated productivity improvements would, however, be relatively modest.

In addition, new and emerging technologies can promote the supply of new services to complement existing price-controlled services or to compete with them. Competing services would be possible to the extent that technologies lower barriers to entry, for example, by allowing bottlenecks to be bypassed. If this results in markets becoming effectively competitive, then this will have implications for the scope of the services that should be price-controlled.

Although there would seem to be widespread support for the proposition that new and emerging technologies have the potential to allow competing services to be supplied, there is considerable uncertainty surrounding the extent to which this will occur and what progress would be made within the next price-control period. It can be noted that:

- demand for internet telephony is growing from a very low base¹⁰³
- previous forecasts for the uptake of internet telephony have proven overly optimistic.¹⁰⁴

Telstra has stated that the competitive effect of IP telephony for its PSTN will be modest over the short term.

While VOIP has been described as a competitive threat for Telstra, the company will respond in a measured way. We believe the maximum net revenue effect on Telstra over the next 18 to 24 months is unlikely to be material in the context of our traditional voice revenues.¹⁰⁵

Various factors confirm this view, and suggest that competitive pressures would be more likely to continue to be limited over a longer period, especially in mass-markets.

¹⁰² BT, *21century_network.ppt*, presented 16 June 2003, accessed 13 October 2004, <www.btplc.com/News/Presentations/Generalpresentations/21stcenturyBT.htm>.

¹⁰³ Refer presentation by Mr Ted Pretty, Telstra, to analysts, *Future Network Evolution And Product Strategy*, 22 July 2004, slide 41, which indicates the Australian market penetration of Voice over IP for 'enterprise' customers at less than 5 per cent, for 'SME's at less than 1 per cent and 'consumer' at less than 0.1 per cent.

¹⁰⁴ Optus, *The Optus IP Index 2004*, August 2004. The report is the third in a series of annual surveys of Optus business and corporate customers, for which 74 customers were surveyed in May 2004.

¹⁰⁵ Telstra, *Telstra Unveils Future Network Evolution and Product Strategy*, media release, 22 July 2004.

The factors that have been considered are those relating to:

- quality of internet telephony services
- commercial terms of supply of underlying broadband services.

The supply of IP telephony services of a quality that would be suitable as a customer's primary voice telephony service requires access to networks and applications that are designed and provisioned for that purpose ('IP telephony broadband networks'). It can be noted that:

- the countries in which IP telephony has attracted material levels of demand in mass markets—South Korea and Japan—are those where high quality broadband networks have been deployed and are supplied at a reasonable price¹⁰⁶
- the current use of IP telephony in Australia is by corporate and government customers that have access to IP telephony broadband networks.

In announcing its next step in supplying voice over IP to residential customers, Telstra notes that various factors would appear to constrain widespread adoption of its service in the immediate future including:

...voice over broadband requires better than entry level (upstream) bandwidth to avoid some limitations of quality

...some new advanced features will require replacement of existing analogue phones with new IP handsets.¹⁰⁷

In addition, contractual terms on which broadband services are supplied can also discourage the use of IP telephony. Typically, the supply of ADSL is conditional on the ongoing supply of a PSTN voice telephony service to the customer.¹⁰⁸ Similarly, Optus charges more for broadband access when supplying customers that do not acquire PSTN telephony.¹⁰⁹

Unless IP telephony broadband networks become available on terms that encourages demand for IP telephony, any competition that results from IP telephony will remain over incremental expenditures. In respect of services supplied to residential customers,

¹⁰⁶ The OECD has noted that Australia has high internet access charges when compared internationally. Refer, OECD, *Economic Survey Australia*, December 2004, pp 110,113.

¹⁰⁷ Telstra, *Telstra Announces Next Step in Voice over IP to Residential Customers*, media release, 7 September 2004.

¹⁰⁸ Telstra, 'Telstra BigPond Broadband—Cable and ADSL terms and conditions', accessed 14 October 2004, <www.bigpond.com/internet-plans/broadband/adsl/termsandconditions/>; 'DSL Layer 3 Internet Grade', accessed 14 October 2004, <telstrawholesale.com/products/access_broadband_dsl3.htm>; 'DSL Layer 2 Internet Grade', accessed 14 October 2004, <telstrawholesale.com/products/access_broadband_dsl2internet.htm>.

¹⁰⁹ Optus, 'Internet services — OptusNet Broadband', accessed 14 October 2004, <www.optus.com.au/Vign/ViewMgmt/display/0,2627,1038_35709-3_6758--View_354,00.html>.

competition would in those circumstances be over the sixtieth dollar of monthly expenditure (i.e. after line rental and broadband internet access fees have been paid). Product bundling (e.g. free local calls or call rebates) and IP telephony customer equipment costs and fixed monthly charges would extend the monthly expenditure threshold before the use of IP telephony became relatively cost effective.

The extent to which IP telephony broadband networks will become available on reasonable terms for the provision of quality internet telephony services in the short to medium term is uncertain but ubiquitous or widespread access is considered unlikely as:

- there are weak incentives for Telstra and other service providers to supply such access networks where this would come at the cost of traditional PSTN revenues—it can be noted that Telstra’s planned offering to mass markets is targeted at second or additional lines¹¹⁰
- residential consumers and a significant proportion of business consumers with broadband access are connected to services that have not been provisioned to a sufficient quality of service—it is reported that around 39 per cent of the proportion of small business with broadband access use plans aimed at the residential market that are not suited to supporting applications such as VoIP¹¹¹
- competitive access networks are currently limited to discrete geographic areas.

That said, there is likely to be relatively greater potential for IP telephony broadband networks or other competitive access networks to be deployed to service particular market segments or particular geographic areas. Measures to encourage efficient investment by competing service providers could be expected to make an important contribution to realising this potential in the medium term.

While these networks may be radio-based, the only such network in respect of which an Internet telephony capability has been signalled is Unwired’s network covering the Sydney basin.¹¹²

Service providers have signalled more extensive investments in DSL overlay networks (where a competing service provider uses its own exchange equipment to supply services over the ULLS). However, the number of such services currently in operation

¹¹⁰ Telstra, *Telstra Announces Next Step in Voice over IP to Residential Customers*, media release, 7 September 2004.

¹¹¹ Pacific Internet, *Latest Research Shows Broadband Delivers Value but Low Tech Dominates*, media release, 21 July 2004 quoting from Pacific Internet, *The Broadband Barometer—A report into Broadband Penetration and Usage among Australia’s Small Business Sector*, July 2004.

¹¹² Unwired, *Sydney Wins the Speed Race with Launch of Unwired High Speed Broadband Internet*, media release, 19 August 2004.

is modest,¹¹³ and the announced investments are limited to only certain exchange service areas and are being made in stages.¹¹⁴

The class of customers that will benefit from competing service offerings is also uncertain, however emerging voice-over-DSL service offerings appear to target customers that require more than four or eight voice lines and a broadband connection.

Since the draft report, Telstra has provided results of imputation testing of the use of the ULLS to supply PSTN voice and broadband services. While the test is very new, the reported results indicate that in the short-to-medium term only limited market segments are likely to benefit from DSL overlay networks. That is, competitors are more likely to enter only lower cost areas and target customers that generate above average revenues.¹¹⁵

In respect of the disruption likely to be caused to markets in which the price-controlled services are supplied, the use of IP telephony or other new and emerging technologies in certain market segments would cause greater disruption to traditional PSTN services than in others.

While there are greater prospects for large corporate and government customers to access IP telephony broadband networks¹¹⁶ or other competitive access networks, the number of customers within that class is relatively small and some of them would not be supplied by means of the price-capped services in any case, e.g. they may also be supplied by means of ISDN or leased lines.

As such, this disruption will become more significant if and when consumers that use the price-capped services for their primary telecommunications service can access IP telephony broadband networks i.e. smaller business and residential consumers.

Based on the above, it is considered that bullish forecasts for competition resulting from new and emerging technologies should continue to be approached with some caution in the short to medium term. While it is reasonable to expect that IP telephony or other competing services will be supplied to a growing number of consumers and that some demand will be churned to these services from the price-controlled services, it is considered more likely that this will relate to incremental expenditures of a minority of consumers. It is not considered likely that substantial migration from the price-capped services would occur in the next price-control period.

¹¹³ As reflected in current demand for the associated Unconditioned Local Loop Service.

¹¹⁴ Primus and PowerTel have each announced intentions to make additional investments in a number of exchange service areas.

¹¹⁵ ACCC, *ACCC Issues Telstra Accounting Separation Report For September Quarter 2004*, media release, 22 December 2004 and ACCC, *Imputation Testing Report Relating to the Accounting Separation Of Telstra for the September Quarter 2004*, December 2004.

¹¹⁶ Of the very limited number of IP telephony services that are currently being supplied, these are typically supplied to large corporate customers or government. Refer presentation by Mr Ted Pretty, Telstra, to analysts, *Future Network Evolution And Product Strategy*, 22 July 2004, slide 41.

8.3.3 Implications of price control arrangements on new and emerging technologies

Price control arrangements can have implications for the use of new and emerging technologies in a variety of ways:

- as a threshold issue, they specify the maximum prices that could be charged for price-controlled services and will generally prevent market entry by service providers that could not supply at or below that price by means of the technologies available to them (unless margins on other services that can be supplied are sufficient to recoup the loss on the price-controlled service)
- they can promote the use of more efficient technologies by Telstra and other service providers by specifying price targets that are informed by associated productivity improvements.

While it is unlikely that the price control arrangements have in the past operated to prevent investment in new and emerging technologies by Telstra, the ACCC considers that the next price control arrangements should better ensure that investment in efficient technologies is not distorted and that resulting competition is sustainable.

The ACCC considers that this will be achieved by price control arrangements that:

- ensure that price of the line rental service reasonably approximates the cost of supply
- ensure that price targets for price-controlled services are informed by reasonably anticipated productivity improvements associated with the use of new and emerging technologies that will be used to supply those services.

While some parties have argued for the setting of more permissive price targets as a means to encourage use of new and emerging technology by competing service providers, as already noted the ACCC would see some difficulty with such an approach.

9 Protection of potentially disadvantaged customers

Price controls are considered a key tool for ensuring that efficiency improvements are passed through to consumers as lower prices for telecommunications services in markets which are not yet fully competitive. However, price controls can also be used to achieve social policy and equity objectives.

The ACCC is directed to consider the appropriateness of the current price controls, and possible future price controls, for the protection of potentially disadvantaged residential and business customers in both metropolitan and non-metropolitan areas.

9.1 Current arrangements

Certain aspects of the current price control arrangements could be seen as assisting potentially disadvantaged consumers. Firstly, Telstra is obliged to provide a low-income package. There is also a cap on the price of local calls and on other calls made in extended zones. Thirdly, there are restrictions on the difference between metropolitan local call prices and non-metropolitan local call prices.

9.1.1 Low-income package

The current price control arrangements specify that Telstra may not increase the price of residential line rental without prior consultation with the ACCC. To approve the line rental increase, the ACCC must be satisfied that Telstra has complied with clause 22 of the *Carrier Licence Conditions (Telstra Corp Ltd) Declaration 1997*. That clause states that Telstra must have a low-income package and must establish a Low-Income Measures Assessment Committee (LIMAC). LIMAC consists of representatives of welfare organisations and reports on the effectiveness of the package to the Minister each year. LIMAC also approves Telstra's marketing for the scheme and comments on any proposed changes.

Telstra's low-income package is marketed as the *Access for Everyone* program.¹¹⁷ Some parts of the program are measures specifically targeted at particular consumers, including holders of Pensioner Concession Cards (PCC) or Health Care Cards (HCC), or consumers without stable accommodation. Other parts of the scheme are available to all consumers. The program offers:

- concessions on phone bills for PCC holders, which Telstra has in the past committed to index to keep pace with line rental prices
- two fixed phone HomeLine packages that have lower line rental but higher call charges than the standard packages

¹¹⁷ For full details, refer Telstra, *Access for Everyone*, viewed 12 January 2005, <www.telstra.com.au/accessforeveryone>

- the ‘Incontact’ phone package which has no monthly line rental charge but does not allow the consumer to make outgoing calls other than emergency numbers, Telstra customer service numbers and calls using Telstra’s Phoneaway card
- targeted programs such as the Bill Assistance Program for people in financial crisis and MessageBox, a message service for consumers without stable accommodation.

9.1.2 Price cap on local calls

Another price control that may in part be targeted at potentially disadvantaged consumers is the requirement that untimed local call prices be capped at 22 cents for calls made from a residential or business phone, and 40 cents for calls made from a public phone. These price caps ensure, to some extent, that low-income consumers, particularly those in non-metropolitan areas, continue to have access to affordable local call services. This was discussed in section 5.2.2.

9.1.3 Non-metropolitan local call price restrictions

Finally, rural consumers may be protected by the restriction that the weighted average untimed local call price from residential lines in non-metropolitan areas in 2002–03, 2003–04 and 2004–05 must not exceed the weighted average untimed local call price from residential lines in metropolitan areas in the preceding financial year by more than 0.4 per cent. A similar restriction applies to business lines.

These restrictions are designed to keep metropolitan and non-metropolitan local call prices at very similar levels, and protect rural consumers from high local call prices. This was discussed in section 5.2.1.

9.2 Views of interested parties

9.2.1 Low-income scheme—benefits from the current arrangements

Telstra viewed the rationale behind the low-income package as protecting ‘low income, low call usage customers from the effects of line rental increases as rebalancing takes place’ (p. 12). Telstra considered that extending the package to provide broader financial support to low-income groups generally would be an ‘inappropriate role’ for the low-income package (p. 12). In its submission to the discussion paper, Telstra stated that the current package had ‘been successful in addressing the government’s (social policy) concerns’ (p. 20). Optus and ATUG supported Telstra’s view on the success of the low-income package in submissions to the discussion paper and at public meetings.

Many submissions supported the ACCC’s draft view that there was potential for low-income consumers to be actually worse off under Telstra’s low-income packages, and that there were possible areas of improvement in the way benefits were delivered under the package (CLCV p. 1, Anglicare p. 1, CTN p. 1, Duncan Kerr, p. 1).

CLCV expressed concern that Telstra did not have a formal financial hardship policy, and submitted that the Bill Assistance Program was not adequate to address financial difficulties as it relied on the consumer going to a consumer welfare agency (p. 2).

The Australian Consumers Association (p. 1) and Duncan Kerr (p. 2) expressed concern that low-income consumers were being forced to use pre-paid mobile phones rather than having a fixed line service, due to the cost of fixed line rental.

The WA Government's submission to the discussion paper noted ABS data concerning the disparity between different income levels in the amount of telecommunications expenditure as a proportion of household income (p. 3). The data shows that telephone charges form a much larger proportion of household expenditure for the lowest income quintile compared to other income quintiles.

Table 9.1 Australian household expenditure: energy, health & telecommunications

	Gross Income Quintiles					All households
	Lowest	2	3	4	Highest	
Average Budget Share (%)						
Domestic fuel and power	8.05	3.83	2.49	1.78	1.16	2.03
Transport	30.17	17.46	14.78	13.87	10.46	13.40
Petrol	6.48	4.22	3.35	2.67	1.84	2.68
Household service and operation	16.90	7.75	5.41	4.31	3.04	4.69
Telephone and facsimile charges	7.95	3.73	2.67	1.91	1.29	2.14
Medical care and health expenses	10.78	5.76	4.04	3.56	2.65	3.69

Source. Household Expenditure Survey 1998-99, ABS catalogue 6535.0.

9.2.2 Low-income scheme—eligibility

A number of submissions supported the ACCC's draft view that pensioner concessions should be extended to other low-income consumers, notably those on Centrelink HCCs (Anglicare p. 1, CTN p. 4, Duncan Kerr, p. 1). Anglicare noted that HCC holders such as Newstart recipients are generally on lower incomes than PCC holders, but receive less assistance than pensioners under the current scheme (p. 1).

Telstra argued that low-income consumers should not receive the same benefits as pensioners because the government's own telephone allowance is only provided to PCC holders (p. 15). Telstra also argued that the use of HCC might not successfully target low-income consumers as the Low-income Health Care Card (LIHCC) may be mostly held by single young students rather than low-income households.

LIMAC (p.2) supported the extension of financial concessions to HCC holders, but noted that there may be practical difficulties in validating eligibility of HCC holders.

9.2.3 Low-income scheme—marketing and consumer awareness

Comment at the public meetings seemed to demonstrate that Telstra's marketing of its low-income scheme had not generated a significant level of consumer awareness.

At the Sydney meeting, Commissioner Willett directly asked Mr Bill Scales from Telstra whether Telstra was comfortable with the level of awareness of its disadvantaged group programs. Mr Scales responded:

No, we're not, and that has been an appropriate... criticism of us. We are trying to address it in a number of ways and we have found it difficult to do so.

Anglicare (p. 1) and Duncan Kerr (p. 1) supported the ACCC's draft view that it would be better if low-income consumers automatically received rebates from Telstra when they received the relevant concession from Centrelink. Telstra did not oppose automatic registration, although it argued that the existence of the Centrepay scheme did not demonstrate an ability to enact automatic registration (p. 15).

9.2.4 Low-income scheme—the regulatory scheme

Telstra's submission to the discussion paper appeared to signal that Telstra considers that it is open to abandon its low-income initiatives (p. 19):

If future price control arrangements were to limit Telstra's flexibility to achieve economically efficient pricing outcomes (e.g. a continued calls – line rental price rebalancing), Telstra would be placed in the unfortunate position of having to reassess its ability to continue to fund social policy initiatives.

However Mr Scales stated at the Sydney meeting that Telstra had no intention of abandoning its current low-income program.

Anglicare supported the ACCC's draft view to strengthen the regulatory scheme, stating that (p. 2):

Although Anglicare has had a good response from the Telstra staff associated with LIMAC... we would welcome strengthened regulatory arrangements to ensure that services for disadvantaged consumers are maintained regardless of Telstra staffing or policy changes.

LIMAC disagreed with the ACCC's draft view, saying that it believed that the current level of Ministerial and/or Departmental control was adequate and appropriate (p. 2).

9.2.5 Arrangements for non-metropolitan consumers

Submissions to the draft report generally did not address the arrangements for non-metropolitan consumers. However, in submissions to the discussion paper, Optus (p. 27), ATUG (p. 13) and CTN (p. 9) all supported price control measures aimed at non-metropolitan consumers. AAPT supported measures for non-metropolitan consumers being provided through the USO (p. 10).

9.3 ACCC assessment of the current arrangements for low-income consumers

The ACCC believes that the following criteria should be used to assess the success of programs aimed at social policy objectives:

- effective targeting—the provision of assistance to people who are in need and the avoidance of provision for those who are not

- achievement of horizontal equity, which means that people who have similar income or ability to pay contribute a similar tax or subsidy amount
- achievement of vertical equity, reflected in the criterion that tax or subsidy contributions differ according to differences in income or ability to pay (i.e. those better-off pay more and those worse-off pay less)
- maintenance of appropriate incentives for consumption and investment
- minimisation of administrative costs, including the costs of raising and distributing funds to achieve social outcomes
- transparency.

The ACCC believes that the current low-income scheme has provided valuable benefits to disadvantaged consumers. However, there may be some problems with the current scheme when assessed according to the above criteria.

9.3.1 Low-income scheme—benefits from the current arrangements

Data indicates that low-income consumers more as a proportion of income on telephone services and have lower levels of access. The ABS data presented by the WA Government shows that low-income households spend a larger proportion of their household expenditure on telephone services compared to higher income brackets. Data from the United States suggests that low-income consumers have substantially lower levels of access to telephone services than other consumers.¹¹⁸ Given these results, it is important that a low-income package provides real benefits to low-income consumers.

Telstra’s alternative billing arrangements – HomeLine Budget and HomeLine Low-income Health Care Card

The ACCC believes that a successful low-income scheme needs to target low-income consumers rather than just low-usage consumers. While usage and income may be related in that low-income consumers may not be able to afford the usage they would like, it cannot be assumed that a low-income consumer only needs to make a small number of phone calls. The ACCC does not agree with Telstra’s view that only low-income consumers who make a small number of calls, and not low-income consumers generally, should benefit from a low-income scheme. Instead, the ACCC believes that an appropriately targeted scheme should allow low-income users to have similar access to basic telephone services as an average user.

Aspects of the current low-income scheme may be directed largely towards low-usage consumers rather than low-income consumers. In particular, Telstra’s two low-income packages—HomeLine Budget and HomeLine Low-income Health Care Card (HomeLine LIHCC)—may penalise low-income consumers who need to make an

¹¹⁸ Federal Communications Commission, *Telephone subscribership in the United States*, October 2004, p. 1. The report found that the telephone penetration rate for households with annual incomes less than \$5000 was 79.1 per cent, while it was 98.1 per cent for households with incomes over \$75,000.

average number of phone calls. In 2003–04, Telstra supplied an average of around 75 local calls per month to retail and wholesale customers.¹¹⁹ The ACCC understands that the average number of monthly local calls for Telstra’s retail residential customers is slightly above this average. The ACCC has produced a comparison of the total bill faced by a consumer on each of Telstra’s four call bundle plans for a varying number of capped calls¹²⁰ each month:

Table 9.2 Total bill faced by consumers on HomeLine plans

	HomeLine plan			
	Plus	Complete	LIHCC	Budget
Price of line rental	\$29.95	\$26.95	\$20.50	\$18.50
Price of a local call	\$0.175	\$0.20	\$0.24	\$0.30
Price of a capped call	\$1.50	\$2.00	\$2.50	\$3.00
# local calls	75	75	75	75
Sub total	\$43.075	\$41.95	\$38.50	\$41.00
Monthly bill with 1 capped call	\$44.58	\$43.95	\$41.00	\$44.00
Monthly bill with 2 capped calls	\$46.08	\$45.95	\$43.50	\$47.00
Monthly bill with 3 capped calls	\$47.58	\$47.95	\$46.00	\$50.00
Monthly bill with 4 capped calls	\$49.08	\$49.95	\$48.50	\$53.00
Monthly bill with 5 capped calls	\$50.58	\$51.95	\$51.00	\$56.00
Monthly bill with 6 capped calls	\$52.08	\$53.95	\$53.50	\$59.00
Monthly bill with 7 capped calls	\$53.58	\$55.95	\$56.00	\$62.00
Monthly bill with 8 capped calls	\$55.08	\$57.95	\$58.50	\$65.00

The above table shows that consumers on the HomeLine LIHCC plan who make the average number of local calls and make five or more capped calls would be better off on HomeLine Plus. Consumers on HomeLine Budget would be better off acquiring HomeLine Plus after making two capped calls. Consumers become relatively worse off the more calls they make. If the average number of local calls for Telstra’s retail residential customers was instead used in this analysis, a smaller number of capped calls would be required before the consumer begins to pay relatively more.

It can therefore be seen that Telstra’s current low-income packages may penalise low-income consumers who make the average number of local calls and just a few capped calls. As such, HomeLine Budget and HomeLine LIHCC do not appear to effectively

¹¹⁹ This is derived by dividing total local calls supplied (9 397m) by total basic access services-in-operation (10.37 m)—data sourced from Telstra Corporation Limited, *2004 Annual Report*, p. 6.

¹²⁰ For this analysis, a capped call is a Telstra domestic long-distance or FTM call where there is a limit on the cost of the call. For all four plans, the cap for a long-distance call is the same amount as the cap for a FTM call.

target low-income consumers generally. Although low-usage consumers might be better off, as noted above, it cannot be assumed that all low-income consumers are also low-usage consumers. The schemes may in fact penalise the low-income consumers that they are supposed to assist.

This can be contrasted with the vulnerable user scheme provided by eircom, Ireland's incumbent telecommunications operator. Under that scheme, the user registers for a bundle of line rental and €5 worth of calls for €23.65. Once the user exceeds the €5 worth of calls, the next €6.01 worth of calls is charged at double rates and any further calls are charged at the standard rates. This means that a consumer on eircom's vulnerable user scheme will never be any more than €1 worse off compared to a standard customer. This scheme has the advantage of at least curtailing the potential detriment suffered by vulnerable consumers that have to make more calls than they had expected when selecting their plan.

An alternative approach is used in the low-income schemes that exist for telecommunications users in the USA and UK, and for energy and water consumers in some Australian states. These schemes provide rebates or discounts that mean that the low-income consumer is never worse off under the scheme when compared to the standard package, and as such may be preferable to the eircom scheme. Alternative low-income schemes are outlined in Attachment B.

Certain submissions argued that increasing numbers of low-income consumers are being forced to use prepaid mobile phones as their primary phone, due to the lower up-front cost in comparison to fixed line monthly rental costs, and less strict credit requirements. However, prepaid mobiles have higher ongoing costs, most obviously because local calls on mobiles are timed calls with a flagfall. The expiry of pre-paid credit would mean that the person would not be able to make outgoing calls, effectively denying them a normally functioning phone service.

This could be seen as another consequence of rebalancing on low income consumers—while some may stop accessing telephone services altogether, others may be switching to prepaid mobiles if line rental is too costly. However, it is difficult to quantify the extent of the use of prepaid mobile phones by low-income consumers. While the growth in prepaid mobile use has been well documented,¹²¹ it is not obvious what proportion is due to the cost of fixed line phones and what proportion is due to changing consumer preferences.

Targeted measures

The targeted aspects of the low-income scheme, such as the Bill Assistance Program and MessageBox service, are more likely to successfully provide assistance to certain targeted consumers. It would not be possible for a consumer to be worse off if they received once-off bill assistance or access to a message service, and these programs deliver important benefits to low-income consumers in particular situations. The ACCC believes that these targeted initiatives in the *Access for Everyone* program should be

¹²¹ For example, refer ACA, *Telecommunications Performance Report 2003-04*, November 2004, p. 11.

continued, particularly as they are likely to be of minimal cost to Telstra. The cost of these schemes is discussed further below.

The ACCC also regards the InContact service as a potentially useful telephone service for people with difficulty in paying their phone bills, but does not believe that it can be regarded as a standard telephone service. The ACCC regards InContact as being strictly a useful ‘last resort’ service that provides some protection for low-income consumers from complete loss of telephone access.

9.3.2 Low-income scheme—eligibility

Pensioners and other low-income consumers receive different benefits from the *Access for Everyone* program. Pensioners on standard HomeLine plans receive a simple rebate on their monthly bill that is at least \$3 and can be up to \$12.25 depending on the number of calls made. Pensioners on HomeLine Budget receive up to \$3.50 of rebates on their local and dial-up internet call bill only.

Low-income consumers who are not pensioners do not currently receive rebates. If they have low call usage, they might benefit from HomeLine Budget or, if eligible, HomeLine LIHCC.¹²² However, an average usage low-income consumer receives little or no benefit from the *Access for Everyone* program.

Pensioners therefore seem to receive a relatively better deal compared to other low-income consumers. There is far less potential for them to be worse off than if they were not on the pensioner concession scheme, as they receive discounts irrespective of which plan they are on.¹²³

The ACCC also notes that HCC holders face more restrictive income and assets eligibility tests and receive lower government benefits than PCC holders.¹²⁴ This implies that HCC holders may have less income and hence find it harder to afford telephone services than at least some pensioners.

Comparatively, the USA’s Lifeline scheme does not exclude non-pensioner low-income consumers from rebates on phone rental. Under that scheme, consumers receive at least \$5.25 and up to \$10 per month rebate on their phone bills. Certain states provide matching support of up to \$3.50 per month, and people living in indigenous tribal lands can also receive further benefits. The scheme is open to low-income consumers generally based on their participation in other low-income assistance programs such as food stamps or energy assistance programs.

¹²² The ACCC notes that this package is only open to LIHCC holders, and not HCC holders more generally. The ACCC understands that LIHCC holders constitute only around one fifth of all HCC holders. Other HCC holders would only be able to access HomeLine Budget, which has no access restrictions.

¹²³ A pensioner could still be worse off if they subscribed to HomeLine Budget and made an average number of local calls and a few capped calls per month.

¹²⁴ Centrelink, *Is there an income/assets test?*, 24 September 2004, viewed 12 January 2005, www.centrelink.gov.au/internet/internet.nsf/payments/pay_iat.htm.

The ACCC also notes that both PCC holders and HCC holders can receive simple rebates or discounts on their energy bills in some Australian states, and that recent reforms in Victoria have extended transport and water concessions to pensioners and all HCC holders.

9.3.3 Low-income scheme—marketing and consumer awareness

Comment at the public meetings seemed to demonstrate that the current marketing of the *Access for Everyone* program has not been successful. For both the targeted and general parts of the *Access for Everyone* program, the awareness data presented by LIMAC shows fairly low levels of awareness even among specific community groups and a generally declining level of awareness.¹²⁵

The ACCC is concerned that the current marketing does not seem to be successfully reaching the low-income scheme's target groups. This is a particular concern for HomeLine Budget and HomeLine LIHCC, which require a high degree of awareness such that consumers can make a rational choice of plan based on anticipated calling patterns and then contact Telstra to switch plans. However, the ACCC notes that there will be substantially different approaches required in promoting different aspects of the *Access for Everyone* program. For example, MessageBox, which is targeted at people without stable accommodation, will require a different and more focused marketing approach to HomeLine Budget, which is available to all consumers with a fixed line home phone.

9.3.4 Low-income scheme—the regulatory scheme

Under the current price control arrangements, Telstra can only increase residential line rental prices if it has adequately fulfilled the low-income obligations in its carrier licence. The licence condition requires that Telstra:

- resources a Low-income Measures Assessment Committee
- has a plan for offering products or arrangements for low-income customers (a 'low-income package') that was previously endorsed by low-income advocacy groups and which has been since changed only after consulting LIMAC
- has a marketing plan, approved by LIMAC, for making low-income consumers aware of the low-income package
- has complied with the low-income package as it exists from time to time
- provides a copy of the low-income package to the Australian Communications Authority.

The ACCC assesses whether or not Telstra has complied with these requirements on each occasion that Telstra wishes to increase residential line rental prices.

¹²⁵ LIMAC, *Telstra's Access for Everyone Package—LIMAC report to the Minister for Communications, Information Technology and the Arts*, April 2004, p. v.

The ACCC notes that this arrangement has a number of potential problems:

- the scheme does not require that the low-income package has been approved by an independent body—the only limitation to changes being made is that LIMAC must be consulted
- the scheme does not permit LIMAC, the ACCC or the Minister to require improvements to the low-income package or the associated marketing plan—only Telstra can initiate changes, which LIMAC is subsequently consulted on
- the scheme does not require that the marketing plan be complied with, only that it exists
- the scheme requires low-income advocacy groups to assess the suitability of the low-income package, and requires LIMAC to assess the low-income marketing plan, without regulatory or Ministerial oversight
- given the submissions and statements made at public meetings that line rental rebalancing is completed and that Telstra considers it unlikely that it will increase its residential line rental prices in the same way it has in the past, linking compliance with the package to increases in line rental prices charged at residential rates may not be sufficient.

In the UK and USA, the low-income schemes are part of the Universal Service Obligation placed on the carriers. Such an approach is arguably more robust than the current Australian approach, as approval of the scheme is set by way of a formal regulatory process. The ACCC notes that AAPT's submission to the discussion paper argued that such an arrangement should apply in Australia (p. 10).

9.3.5 Low-income scheme—cost of the scheme

Telstra's submission to the discussion paper (p. 20) estimated that its annual contribution for the *Access for Everyone* program was more than \$160 million for the 2003–04 financial year. As Telstra has not provided a detailed breakdown of how this figure is derived, the ACCC is unable to assess its accuracy.

However, the ACCC notes that the cost of many aspects of the scheme may be quite modest and largely consist of administrative costs. In particular, the cost of the scheme will not be the face value of parts of the scheme such as the \$25 bill assistance vouchers or \$12.25 pensioner discount.

It should be noted that services to low-income consumers are included in the basket of services that are subject to price caps. If Telstra increases its discounts to low-income consumers, it would be able to slow its price decreases for other users under the broad price cap. In effect, this permits cross-subsidisation of any revenue that may have been foregone in providing discounts or rebates to low-income consumers by allowing the recovery of this revenue from other users. As such, Telstra would be unlikely to forego much revenue as a result of pensioner or low-income consumer discounts.

Other reasons that the cost of the low-income package will be closer to administrative costs include:

- Without pensioner concessions, many pensioners might be unlikely to be able to afford a phone line at all or to make calls. This would mean that Telstra would lose the revenues for line rental and calls made to and from those lines. The provision of pensioner concessions to some extent preserves these revenues.
- Given the financial circumstances of customers that use the Bill Assistance program, it would be doubtful whether the charges that are written off under that program would in any event have been paid in full. As such, while the voucher is an important short term benefit to the consumer, it is unlikely to cost Telstra a significant amount.
- Parts of the scheme are unlikely to have needed additional research and development by Telstra or ongoing network related costs—e.g. HomeLine Budget and HomeLine LIHCC are simply alternative billing arrangements, and MessageBox is an instance of the MessageBank Virtual¹²⁶ retail product.¹²⁷

9.4 ACCC assessment of current arrangements for non-metropolitan consumers

The current price control arrangements include measures that go some way towards addressing potential disadvantage arising from a customer being located outside of a metropolitan area. The principal measure is the requirement that local call prices in non-metropolitan areas approximate the equivalent prices in metropolitan areas for business and residential consumers respectively.

In addition, there are a number of other government initiatives—some of which are reflected in the current price control arrangements, such as extended call zones—that also address potential disadvantage to non-metropolitan consumers.

It was noted in section 5.2.1 that consumers of telecommunications services can be disadvantaged by distance. More particularly, consumers can be disadvantaged by the lower level of competition in non-metropolitan areas, which may lead to higher costs and lower quality of service. Additionally, such consumers may not have access to certain services, such as broadband internet, or only have access to services provisioned to a lower standard.

The effect of geographic price relativity in local calls means that both metropolitan and non-metropolitan consumers face similar local call prices below the 22 cent call cap

¹²⁶ MessageBank Virtual diverts calls and allows direct dialling to a central message service that can be accessed by dialling a mailbox number from any phone. It is available to all consumers. <www.telstra.com.au/phones/homeservices/features_opt_mbankvirt.htm>

¹²⁷ The ACCC notes that MessageBox could be revenue-positive for Telstra as callers leaving messages for the MessageBox user would be charged for their calls.

(apart from the exceptions for the HomeLine Budget and HomeLine LIHCC plans). The effect of the extended zones subsidy is that users in these areas are charged at untimed local call rates for all calls that end within the same extended zone or an adjacent extended zone, leading to a greater number of calls being charged at untimed local call prices than would otherwise be the case. There is also an entitlement to dial-up internet at local call rates if BigPond is chosen as the ISP.

It can be noted that the current geographic price relativity only applies to untimed local calls and does not mandate that rural consumers must not pay more than metropolitan consumers for their telecommunications services more generally. Data provided by Telstra indicates that non-metropolitan consumers make lesser use of local call services—both in number of calls and as a proportion of total expenditure—than metropolitan consumers, but use significantly more domestic long-distance call minutes. Thus the current parity will not ensure complete equity in calling costs. Given this, the ACCC considers it would be appropriate for the reasonableness of Telstra’s call charging boundaries in non-metropolitan areas to be investigated.

Having said that, to require Telstra to implement geographic parity in pricing for all fixed-line services, or for all price-controlled services, would exacerbate efficiency losses associated with the current initiatives, given the disparity in costs of providing fixed-line services in metropolitan and non-metropolitan areas.

It can also be noted that non-metropolitan consumers would have the option of selecting other service providers to supply pre-selectable services and that this would be expected to curtail Telstra’s pricing of those services in non-metropolitan areas to some, albeit limited, extent. That said, competition in non-metropolitan areas is relatively weak.

The ACCC notes that the disadvantage potentially faced by rural customers has partially been ameliorated by various initiatives—that would appear to have less detriment for economic efficiency—such as:

- the Higher Bandwidth Incentive Scheme (HiBIS) which provides ISPs with incentive payments to establish broadband services in rural and regional areas—which is funded by direct Australian government payments to service providers
- the extended zones scheme which is funded by government payments to Telstra
- additional network enhancements and other initiatives in rural and regional areas—in respect of fixed-line services and mobile services—that the Australian Government has committed to fund.

The ACCC understands that government funding to a total of around \$1 billion has been made available in respect of these initiatives, with a significant proportion of this funding being provided directly or indirectly to Telstra.

9.5 ACCC final recommendations for future arrangements

9.5.1 Arrangements for low-income consumers

The ACCC's assessment of Telstra's low-income scheme noted a number of issues:

- the low-income package as a whole seems to be largely unknown in the general community
- low-income consumers that are on the package's HomeLine plans may in fact pay more for basic telephone services than other consumers should they make similar numbers of calls
- the low-income package offers lesser benefits to low-income users who are not pensioners e.g. HCC holders
- the current regulation that underpins the arrangements may not be the most robust approach.

The ACCC believes that the low-income scheme is a good initiative that has delivered some important benefits to low-income consumers of telecommunications services, and recommends that a low-income scheme continue to be offered. However, given the above concerns, the ACCC believes that there are changes that could improve aspects of the scheme.

Ensure that low-income consumers are no worse off than other users

The ACCC believes that the two HomeLine plans marketed to low-income consumers—HomeLine Budget and HomeLine LIHCC—only benefit low usage consumers. The ACCC believes that it would be reasonable to retain HomeLine Budget so that consumers generally who wish to take up a phone plan with lower monthly line rental but higher call charges can do so. However, the ACCC believes that the HomeLine plans in the *Access for Everyone* program should better target low-income consumers.

This would require either that the plans are varied or concessions extended so that a low-income consumer that makes the same use as other end-users on average pays no more than if they were on a standard plan.

Alternatives to benefit low-income consumers

The ACCC believes that two possible changes to the current system could better provide benefits to low-income consumers of telephone services:

- extend the current pensioner rebate system to other low-income consumers or
- provide a safety net plan to low-income consumers such that they will pay no more than other users.

The first measure would provide an amount off low-income consumers' bills. It would essentially be an extension of the current pensioner concession scheme to other low income consumers, who currently receive no targeted benefits from the *Access for*

Everyone program. Such a scheme would be similar to the Lifeline scheme in the USA and concession schemes operating for energy and water in some Australian states.

Alternatively, a safety-net phone plan could be introduced. This would be similar to the scheme currently in operation in Ireland.¹²⁸ The low-income consumer could initially pay HomeLine Budget line rental and call rates, but at a certain threshold expenditure would switch to HomeLine Plus—which is currently the standard line rental plan—call rates. The threshold would be determined by a breakeven point between the two plans and would ensure that the low-income consumer would not pay more than under the standard plan.

A safety net plan could replace HomeLine LIHCC, which the ACCC understands has not had significant take-up.

Eligibility

An important issue with either a concession scheme or a safety-net plan would be determining which groups would receive the concessions or be eligible for the plan. The most obvious target group would be HCC holders, who may have lower income than some PCC holders and do not receive government telephone assistance. The ACCC notes Telstra's concerns about students holding LIHCCs, which are a subset of HCCs. However, the ACCC would also be concerned that omitting LIHCC holders from rebates would exclude genuinely low-income consumers who do not fall into other categories of HCC.

While the ACCC does not regard verification issues as a barrier to providing benefits to HCC holders, it recognises LIMAC's comment that HCC eligibility may be practically more difficult to validate, compared to PCC eligibility. This is because HCC holders are a more unstable group. This instability is due to HCCs generally being issued for a shorter period of time, and the fact that HCC eligibility reflects possibly transient circumstances relating to employment and income. However, the ACCC believes that advances in technology will help improve eligibility verifications procedures in the future. The ACCC also notes that any eligibility verification issues have not prevented Telstra from offering HomeLine LIHCC.

Telstra argued that it would be unreasonable to provide rebates to all low-income consumers as it would be costly to Telstra. Telstra also argued that low-income consumers who are high users of telephone services have received sufficient benefits from the lower call costs in rebalancing. However, research indicates that the class of low-income consumers who make high use of telephone services may be small.¹²⁹ It is therefore unlikely that many low-income consumers would receive excess benefits from a rebate scheme, particularly given that under each of the proposed arrangements, only a finite discount would be extended.

¹²⁸ Under that scheme, the user never pays more than €1 than they would have under a standard plan.

¹²⁹ See, for example, Roy Morgan Research, *Victorian Utility Consumption Survey 2001*, June 2002, pp. 41,46,86 which indicates that concession recipients on average use less electricity, gas and water than non-concession recipients, despite receiving discounts or rebates on all these services.

Local calls

The existing 22 cent local call cap does not apply if a customer is receiving line rental at lower than the standard rate. Telstra charges 24c and 30c for a local call for customers on the HomeLine LIHCC and HomeLine Budget packages respectively. To ensure that low-income consumers are no worse off compared to other consumers, the ACCC recommends that this exception to the local call cap should not apply to low-income consumers.

Ancillary charges

The ACCC noted in chapter 5.2.6 that ancillary charges such as late payment fees may impact heavily on low income consumers. There are current aspects of *Access for Everyone*, such as the Bill Assistance Program, that may limit the potential adverse effect of ancillary charges on low-income consumers. However, the ACCC recommends that consideration should be given to the impact of ancillary charges on low income consumers.

Marketing and the automatic registration for available rebates

The ACCC notes that the marketing of the low-income scheme came under heavy criticism in public consultations and that Telstra conceded that there were problems with its promotion of the scheme.

The ACCC's draft view was that these difficulties could be more readily overcome if:

- where feasible, elements of the low-income package were restructured such that customer election was not required—e.g. automatic access to concessions based on Centrelink entitlements
- the marketing effort was directed to the remaining elements of the low-income package that still required customer election.

In practice this would require that when a pensioner or low-income consumer successfully registers for a PCC or HCC, Centrelink would inform Telstra and the appropriate arrangements would then be enabled. This would enable pensioners and HCC holders to receive appropriate benefits without having to be directly aware of the scheme and apply to receive the rebates.

The ACCC has consulted Centrelink about the possibility of an automatic registration scheme. Centrelink has advised the ACCC that the scheme may not be possible due to current restrictions in the *Privacy Act 1988*. The ACCC understands that there would be some impediments to Telstra, as a private company, receiving information about welfare recipients from Centrelink without their prior knowledge and agreement. These impediments may mean that a system of automatic registration would not be feasible at this stage. However, these restrictions do not prevent Telstra from checking the eligibility of HCC holders.

There may also be some difficulties due to Centrelink concessions being based at an individual level but telephone services consumed at a household level. The ACCC can see potential problems where more than one member of a household was on a Centrelink PCC or HCC.

If automatic registration is not feasible, the ACCC believes that it will be important that the current marketing of the scheme is improved. The ACCC recommends that LIMAC continues to explore ways to improve the public awareness of the low income scheme.

The ACCC believes that LIMAC should engage in regular direct contact with Centrelink or other government or non-government agencies that distribute information to eligible consumers. Regular dialogue, directly between LIMAC and the agencies, will allow LIMAC's advice on marketing to better take advantage of changing policies and associated opportunities that may arise. The ACCC understands from its discussions with Centrelink that it would be possible, for example, for general messages about the availability of low-income telephone concessions to be displayed in Centrelink customer service centres or distributed with concession cards.

The ACCC also recommends that consideration be given to more thorough use of Telstra's general information channels, such as bill inserts.

Regulatory arrangements to be strengthened

The ACCC believes that it is more appropriate for the current licence condition to be amended to require Telstra to comply with a low-income package and associated marketing plan that the Minister has specified.

Ministerial specification would permit interested parties to raise improvements that they considered necessary and provide a mechanism by which the interests of disadvantaged consumers and Telstra's commercial interests could be considered. The current regulatory scheme means that improvements or suggestions from parties other than Telstra are not necessarily heard.

The ACCC considers that revision to the current regulatory arrangements is essential given:

- the problems in aspects of the existing low-income package when compared to equivalent schemes
- Telstra's submission to the discussion paper that indicates a view that it is open to it to withdraw benefits it has made available to date to low-income consumers
- the weakness of the current arrangements that, e.g., only require that a marketing plan be made but not necessarily complied with substantively.

LIMAC would continue to have a central role in liaising with Telstra over any proposed improvements to the package and providing its annual report to the Minister on the package and its marketing. However, it would also have the ability to propose improvements to the scheme to be formally considered by the Minister, a function it currently lacks.

9.5.2 Arrangements for non-metropolitan consumers

The ACCC's recommendation is that the existing price control arrangements for non-metropolitan consumers should be retained, but that the current local call relativity should not be extended. This is because:

- local call price relativities go some way to providing rural consumers with better access to basic everyday telecommunications services, albeit with some detriment to economic efficiency
- while there would be some prospect to deliver better access through competition, it is relatively unlikely that competitors would seek to compete on price in the supply of local calls in non-metropolitan areas generally
- while it would be feasible to deliver better access in a way that would have lesser consequences for efficiency—for example, by government subsidy—it does not seem practical to fund this initiative in that way as the size of the subsidy would turn on Telstra’s own pricing decisions in metropolitan areas
- targeted programs already exist or could be developed to overcome other disparities between access to services in metropolitan and non-metropolitan areas.

The detriment to economic efficiency involved in maintaining the current arrangements is moderated due to:

- the relatively fewer local calls made in non-metropolitan areas
- the provision of discrete government subsidies to fund the extended call zone initiatives.

The ACCC believes that targeted programs are a more appropriate means by which to provide better access to telecommunications services to non-metropolitan consumers in that:

- in addition to making services more affordable, they can act to make a greater range or better quality of services available
- they are preferable from an economic efficiency perspective.

Attachment A Telstra's TFP measures and the appropriate level of 'X'

A.1 Principles for determining the value of X

The price-cap that is recommended for the broad basket of price-capped services is expressed in the following terms:

$$\text{Annual Change in Price} = \text{CPI} - X$$

where 'X' is the annual percentage amount by which the price of the price capped services would be required to reduce in real terms.

Price Index and X inputs

The ACCC believes that the X value should be determined having regard to Telstra specific productivity improvements less economy-wide productivity improvements. Economy-wide productivity improvements are deducted as, everything else being equal, these would be present in the CPI.¹³⁰ Therefore, the X value should seek to capture only the extent to which Telstra's productivity outperforms that of the economy as a whole.

Regulators in most countries including Australia, New Zealand and the United Kingdom prefer the use of the Consumer Price Index (CPI) as the relevant price index in the price-cap formula.

The CPI element of the price cap formula may be specified either in terms of expected price inflation in the current period or inflation in the previous period. The latter is certain and easier to apply but may delay the producer's compensation for rising costs at times of increasing inflation. The opposite will happen at times of declining inflation.

The current price controls use the historical eight-capital-average CPI recorded in the previous year. The ACCC received no advice on this issue in the submissions and considers it appropriate to continue with the index currently in use.

Forward-looking analysis

As the X is being set for the next price control period, this analysis is conducted on a forward-looking basis. That said, it is not possible to know with certainty future productivity gains, thus the analysis seeks to measure the productivity gains that are reasonably anticipated within the forecast period. This analysis has regard for:

- the productivity gains that have been observed for the period from 1999–00 to 2003–04

¹³⁰ This approach is used by the Productivity Commission and by the US Federal Communications Commission— Access Economics, *Review of Price Control Arrangements on Telstra*, a report prepared for DCITA, August 1998, p. 56.

- currently anticipated developments that would be expected to influence Telstra's productivity performance.

Use of TFP as a measure of productivity improvements

The best comprehensive summary of an enterprise's overall performance is provided by total factor productivity (TFP)¹³¹ which is calculated as the ratio of two indexes—the aggregate quantity of outputs to the aggregate quantity of inputs. Consequently, the impact of technical progress, economies of scale or of scope and managerial improvements are included in estimates of TFP growth. Although there are ways of decomposing the estimated TFP growth, an aggregate measure is considered sufficient for determining an appropriate value of 'X' in the CPI – X price cap.

Use of Telstra-wide or more specific TFP measures in setting an X value

As X is being set for a basket consisting of some of the services that Telstra supplies over its fixed-line infrastructure, the ACCC considers that it would be more appropriate to measure productivity improvements that are specific to those services.

That said, there are difficulties in measuring productivity improvements for specific services that are supplied over shared infrastructure. These difficulties centre upon the appropriate allocation of cost between each of the services that are supplied over the infrastructure. While Telstra regularly performs such cost allocations, it can be argued that the basis upon which the allocations are made involve a high degree of subjectivity and may not be reliable for present purposes.

Accordingly, in assessing Telstra's productivity performance, the ACCC has had regard for productivity improvements of the fixed-line infrastructure in addition to productivity improvements of the price-capped basket of services.

The ACCC has had regard for productivity improvements of the fixed-line infrastructure, rather than that of all of Telstra's business units as:

- problems associated with cost allocation are largely overcome at the fixed-line infrastructure level as network costs can be allocated directly
- it is a more straightforward exercise to draw conclusions about the TFP of the price capped basket of services—this is because:
 - there are fewer extraneous services
 - it can be expected that TFP measures for the price-capped services and the additional services supplied over the fixed-line infrastructure would tend to be more interdependent given the degree of common costs that they share.

¹³¹ See Industry Commission, 'Government (Non-Tax) Charges', Report No. 422, Vol. 3, *Efficiency Issues and Public Enterprises*, AGPS, 1989, p. 134.

TFP measures that have been estimated

As noted above, the ACCC has measured TFP for Telstra's fixed-line infrastructure and for the price-capped basket of services. The analysis has been conducted for the period from 1999–00 to 2003–04. Sections A.2 and A.3 present details of these TFP measures.

The ACCC has also measured TFP for all of Telstra's business units for information. The analysis has been conducted for the period from 1999–00 to 2003–04 having regard to actual data, and for the period 2004–05 to 2006–07 on the basis of projections that Telstra has made. Section A.4 presents details of these TFP measures.

A.2 TFP measures for Telstra's fixed-line infrastructure

A.2.1 The basic data

The ACCC has estimated the TFP change for Telstra's fixed-line infrastructure using data for the period from 1999–00 to 2003–04.

Scope

Telstra's fixed-line infrastructure comprises its Public Switched Telephone Network ('PSTN') and its Integrated Service Digital Network ('ISDN') and Digital Subscriber Line ('xDSL') overlay networks. Revenues from Telstra's fixed-line infrastructure account for about half of Telstra's total revenues.

A number of discrete services can be supplied over the fixed-line infrastructure ('the fixed-line products'). The following fixed-line products were included in the TFP study:

- Basic Access Lines
- Local calls
- National long distance calls
- Fixed-to-Mobile calls
- International calls
- International Leased Lines
- Domestic Leased Lines
- Digital Data Service
- ISDN
- Packet Switched Data
- Pay Phone Service
- Internet Service
- Asymmetric DSL
- Conditioned Local Loop
- Unconditioned Local Loop
- Local Carriage Service—which comprises wholesale line rental and wholesale local calls
- Domestic PSTN Origin/Term (Declared)
- Digital Data Access (Declared)
- Transmission (Declared & Non-Declared)
- Local Number Portability

The following fixed-line products were omitted from the study, as Telstra's Regulatory Accounting Framework (RAF) reports indicated that they had not been supplied within the relevant period:

- Symmetric DSL
- Local PSTN Origin/Term (Declared)
- ISDN Origin/Term (Declared)
- Freephone & Local Rate Number Portability

Data sources

With some exceptions noted below, all data for the fixed-line TFP study (except the price indexes and elements of the user cost of capital) are sourced from Telstra's RAF reports. The RAF provides details of revenue, and disaggregated cost and demand data for the fixed-line products and other services.

Output index

The Tornquist Index procedure was used to construct the output index. The output index is made by aggregating growth rates of all outputs while revenues from individual services are used as weights.

The output index for the aggregate fixed-line products is represented by the aggregate deflated revenue. The fixed-line services price index was used to deflate revenue. Details of the construction of this price index are contained in section A.2.5.

The revenue categories included are retail revenue, internal wholesale revenue and external wholesale revenue as reported under the RAF.

Changes in the deflated revenue reflect the actual changes in the quantity of services. The Productivity Commission views that:

The quantity index for outputs may be estimated by the revenue earned from the output divided by a price index for output. Similarly, the quantity index for inputs is equal to expenses incurred in producing the outputs divided by a price index for inputs.¹³²

This is so because, while any change in revenue may occur either through a change in price or in quantity or through changes in both, the price effect can be neutralised by deflation with the price index leaving any change in the constant price revenue as occurring only through changes in quantities.

¹³² See Productivity Commission: *International Benchmarking of Australian Telecommunications Services*, 1999, p. 212. See also, W. G. Waters II and J. Street, 'Monitoring the Performance of Government Trading Enterprises', *Australian Economic Review*, 1998, 31, 4, pp. 357-71. Footnote 3 states that the output and input indexes must satisfy the product test, for example, multiplying the price index times the quantity index should be consistent with the revenue index for output and expenditure index for inputs.

To test the reasonableness of constructing the output index on an aggregated revenue basis, an alternative output index was constructed using disaggregated revenue and price data for services where this was available. This was undertaken because where some services may be increasing or decreasing in price at different rates, an aggregated approach may overstate or understate actual change in output. In this case, a higher output index was derived. As such, the ACCC considers that use of an aggregated approach in this instance represents a conservative approach to estimating TFP.

Input index

Like the output index, the input index was constructed using the Tornquist Index procedure. The index is made by aggregating growth rates of all inputs, the respective cost shares being used as weights for aggregation purposes. The input index includes all operation and maintenance costs due to the fixed-line services. It also includes the deflated value of capital assets sourced from the RAF fixed asset statements.

The operation and maintenance costs were deflated by the CPI adjusted for the effect of the GST. The adjustment was made by deducting from the 2001 CPI the one-off impact of the introduction of the GST as estimated by the Commonwealth Treasury—this is 2.5 percentage points.¹³³

While some components—such as labour costs—are more likely to have increased in line with unadjusted CPI, other components are more likely to have increased in line with the adjusted CPI. As such, use of the adjusted CPI would tend to overstate operation and network cost inputs and hence represents a conservative approach.

The capital input was deflated by the capital price index (KPI) sourced from the Australian Bureau of Statistics (ABS) client service—the ABS uses this index in order to deflate capital construction activities in the telecommunications industry. As the index is sourced from the ABS client service, it is not publicly available.

In terms of a publicly available index, a capital price deflator for communications services (KPIL) can be derived from the 2003–04 National Accounts¹³⁴. Although this index is derived from published data it is not specific to the telecommunications industry—it would for instance include postal services. That said, in this study the index derived from the National Accounts has been used for sensitivity testing and the results are presented.

As the quantity of capital input was used (as opposed to using the cost of capital) depreciation cost was deducted from the network cost to avoid double counting. The user cost of capital is used as the weight for capital input. Details of the user cost of capital components are contained in Table A.8.

¹³³ See Commonwealth Treasury, *Midyear Fiscal and Economic Outlook 2000-01*, pp. 12–13; The Budget Estimates, 2001-02; and also Commonwealth Treasury, *Preliminary assessment of the impact of The New Tax System*, April 2003, p. 15.

¹³⁴ Australian Bureau of Statistics, *2003–04 National Accounts*, Catalogue no. 5204.0, Table 71.

Following the Bureau of Industry Economics the annualised user cost of capital was defined as:¹³⁵

$$\text{VAUC}_t = (r_t + d - \Delta P_t / P_{t-1}) P_t K_t \quad (1)$$

where:

VAUC = value of user cost

r is the opportunity cost of holding capital in year t

d is depreciation rate (assumed to be 10.4 per cent)¹³⁶

$\Delta P_t / P_{t-1}$ is the annual rate of change in the price of capital

P_t is the price of capital

K_t is the physical quantity of capital stock in year t .

Often a 10-year bond rate is considered for quantifying the opportunity cost of holding capital. However, in line with the reported common practice in conducting infrastructure TFP studies in Australia,¹³⁷ an opportunity cost of 8 per cent was chosen—which represents an increment above the 10-year bond rate.

Data characteristics

Section A.2.4 provides descriptions of the overall movements and the year-to-year changes in the variables used in the study. It may be observed that the annual changes in some variables have been quite unusual. This is particularly the case with external wholesale costs and capital data that have risen at a disproportionately faster rate than output. That said, changes in the aggregate input data remain fairly smooth and overall movements appear reasonable.

A.2.2 Results

TFP measures for Telstra's fixed-line infrastructure are presented in Table A.1. These measures have been derived on the basis of using KPI as deflator for the value of capital assets.

¹³⁵ Bureau of Industry Economics, *International Performance Indicators: Telecommunications*, Research Report 65, AGPS, Canberra, 1995. See also e.g. Steering Committee on National Performance Monitoring of Government Trading Enterprises, *Measuring Total Factor Productivity of Government Trading Enterprises*, 1992, p. 18.

¹³⁶ Telstra used this depreciation rate in an internal paper provided to ACCC staff in a meeting on 30 September 2004.

¹³⁷ D. Lawrence and E. Diewert, *Regulating Electricity Networks—The ABC of Setting X in New Zealand*, Meyrick and Associates, ACORE Seminar, Canberra, August 2004, p. 12.

The table shows that fixed-line output has grown by a small amount over the period, but that total input use has fallen substantially, resulting in TFP growth at an average annual compound rate of 5.4 per cent over the period 1999–00 to 2003–04.

Table A.1 TFP measures for Telstra’s fixed-line services infrastructure—KPI deflator

Year	Output	Input	TFP	Δ TFP
1999–00	1.000	1.000	1.000	
2000–01	1.015	0.864	1.175	17.5%
2001–02	1.014	0.852	1.190	1.3%
2002–03	1.014	0.822	1.234	3.6%
2003–04	1.011	0.820	1.233	-0.1%
Comp Δ% 2000-04	0.3%	-4.8%	5.4%	

- Comp Δ% means average annual compound growth rate.

As noted above, an additional measure has been derived on the basis of using the alternative price index for capital input (KPIL) for sensitivity testing. The results of this sensitivity test are presented in Table A.2.

TFP measures presented in Table A.2 are based on the same output index as presented in Table A.1. The difference between TFP measures are due to changes in inputs that result when using KPI and KPIL respectively. Table A.2 shows that total input use has still fallen, but by a lesser amount than in Table A.1. This results in TFP growth at an average annual compound rate of 4.5 per cent over the period 1999–00 to 2003–04.

Table A.2 TFP measures for Telstra’s fixed line services infrastructure—KPIL deflator

Year	Output	Input	TFP	Δ TFP
1999-00	1.000	1.000	1.000	
2000-01	1.015	0.874	1.161	16.1%
2001-02	1.014	0.873	1.162	0.0%
2002-03	1.014	0.846	1.199	3.2%
2003-04	1.011	0.847	1.194	-0.4%
Comp Δ% 2000-04	0.3%	-4.1%	4.5%	

- Comp Δ% means average annual compound growth rate.

A.2.3 Conclusions and summary

The TFP results presented in this study are based mainly on the revenue and cost data provided in Telstra’s RAF reports. Changes in the aggregate deflated fixed-line revenue

forms the output index and changes in the aggregate deflated operating and network costs and capital input form the input index. The Tornquist Indexation procedure, an annually-chained index, has been used for aggregating growths in both inputs and outputs.

Annual changes in some variables used in the study appear unusual—this is particularly the case with external wholesale costs and capital data, which increased disproportionately more than external wholesale output. However, the changes (reductions) in the aggregate input data are fairly smooth and overall movements appear reasonable in the light of continued improvements in Telstra’s operational efficiency. Further, the use of the total fixed-line infrastructure means that aggregated data will overcome any abnormalities of allocations of those costs.

The reported TFP results range from 5.4 per cent when the telecommunications-specific capital price index (KPI) is used as a deflator of capital input to 4.5 per cent when the communications sector capital price index (KPIL) is used.

These results are on the basis of aggregate deflated revenue and cost data. Use of a more disaggregated approach would be expected to give higher TFP measures.

Having regard to the above and remaining on the conservative side, the ACCC concludes that TFP of the fixed-line infrastructure has been growing at an annual average rate of approximately 5.4 per cent over the period 1999–00 to 2003–04.

A.2.4 Data Characteristics

- By and large, aggregate nominal revenue declined over the study period although external wholesale revenue has increased. In real terms after indexation by a telecommunications-specific index, aggregate fixed-line revenue remained roughly constant. External revenue increased from [c-i-c] per cent of the total to [c-i-c] per cent.
- Aggregate operation and network cost declined by [c-i-c] per cent in the first year followed by declines of [c-i-c] per cent and [c-i-c] per cent in the second and third years respectively. It increased by [c-i-c] per cent in the final year. Overall aggregate operation and network cost fell by [c-i-c] per cent over the period.
- Aggregate capital input declined by [c-i-c] per cent in the first year followed by a [c-i-c] per cent increase in the second year, a fall of [c-i-c] per cent in the third year and again a [c-i-c] per cent increase in the final year. Overall, capital input declined by [c-i-c] per cent over the period.
- Retail and internal wholesale operation and network cost declined by about [c-i-c] per cent over the study period. It declined significantly by [c-i-c] per cent in 2000–01 followed by a fall of [c-i-c] per cent in 2001–02 and another fall of [c-i-c] per cent in the following year. However, it increased slightly by [c-i-c] per cent in the final year.
- External wholesale operation and network cost increased by [c-i-c] per cent over the period. The year-to-year changes were erratic again. It declined by [c-i-c] per cent

in the first year followed by a [c-i-c] per cent increase in 2001–02, by another [c-i-c] per cent in 2002–03 followed by a [c-i-c] per cent increase in 2003–04.

- In all cases, external wholesale costs have increased disproportionately with external wholesale revenue.

Details of the data used in the study

Table A.3 Revenue data

Year	Ret rev	Δ%	Ext Rev	Δ%	Total Rev	Δ%
1999-2000	[c-i-c]		[c-i-c]		[c-i-c]	
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

- Ret rev includes retail and internal wholesale revenue and Ext Rev is external wholesale revenue.

Table A.4 Operation cost data

Year	RETOM	Δ%	EXOM	Δ%	TTLOM	Δ%
1999-2000	[c-i-c]		[c-i-c]		[c-i-c]	
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
Overall % Δ	[c-i-c]		[c-i-c]		[c-i-c]	

- RET stands for retail and internal wholesale while EX stand for external wholesale and OM is operation and network cost.

Table A.5 Fixed Asset Data

Year	RETK	Δ%	NWSK	Δ%	XWSK	Δ%	Total Capital	Δ%
1999-2000	[c-i-c]		[c-i-c]		[c-i-c]		[c-i-c]	
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
Overall Δ	[c-i-c]		[c-i-c]		[c-i-c]		[c-i-c]	

- NWS and XWS stand for Internal Wholesale and External Wholesale
- K stands for capital assets

Table A.6 Price indexed used

Year	CPI	CPIG	KPI	FLP	KPIL
1999-2000	1.000	1.000	1.000	1.000	1.000
2000-01	1.060	1.035	1.031	0.944	1.004
2001-02	1.091	1.065	1.049	0.909	0.993
2002-03	1.124	1.098	1.035	0.927	0.974
2003-04	1.151	1.123	1.040	0.942	0.970

- FLP means price index for fixed-line services.
- CPIG is GST-adjusted CPI and KPI and KPIL are alternative price indexes for capital input.

Table A.7 Components of user cost of capital with KPI

Year	Depreciation rate	Opportunity cost of capital	%Δ in capital price	UCR
1999-2000	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

- UCR means rate of user cost of capital.
- %Δ in capital price is based on the capital price index sourced from the ABS client service.

Table A.8 Components of user cost of capital with KPIL

Year	Depreciation rate	Opportunity cost of capital	%Δ in capital price	UCR2
1999-2000	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

- UCR2 means rate of user cost of capital.
- Opportunity cost of capital is sourced from D. Lawrence and E. Diewert, *Regulating Electricity Networks—The ABC of Setting X in New Zealand*, Meyrick and Associates, ACORE Seminar, Canberra, August 2004, p. 12.
- %Δ in capital price is based on the capital price index sourced from the ABS, Cat No: 5204.0.

A.2.5 Price index for fixed-line services

Tables A.9 and A.10 present the price and quantity data used for construction of the price index for fixed line services. A Tornquist Index that aggregates growth rates of individual quantities by the arithmetic average of their revenue shares for every previous and current year was used. The Tornquist Index is an annually-chained index.

Data limitations mean that an average price cannot be derived for all of the fixed-line products included in the study. The services not represented within the price index are:

- International Leased Lines
- Domestic Leased Lines
- Internet services
- Digital Data Service
- Packet Switched Data
- Conditioned Local Loop
- Transmission (Declared & Non-Declared)
- Local Number Portability
- Digital Data Access (Declared)

The services present in the fixed-line price index represent 85 per cent of total revenue of the fixed-line products over the entire period, and between 90 per cent and 83 per cent of annual revenues.

Of the services not present in the fixed-line price index, the following comprise greater than one per cent of total fixed-line revenue—either over the entire period or in 2001–02, 2002–03 or 2003–04:

- Domestic Leased Lines
- Digital Data Service
- Packet Switched Data
- Internet service

- Transmission (Declared & Non-Declared)

In respect of each of these services it would appear that Telstra's prices would have fallen over the period of the study. Telstra's Annual Reports note that competition has put pressure on Telstra's prices in data and Internet markets—which include digital data services, leased lines and frame relay (a packet switching technology) and Internet services—and also in wholesale transmission markets. For instance, in respect of 2003–04:¹³⁸

While the data and Internet markets have been experiencing growth, competition has put pressure on Telstra's prices.¹³⁹

Competition is strong in the wholesale provision of transmission services. The price is falling as new competitors enter the wholesale market¹⁴⁰

Data limitations mean that average prices cannot be derived for 1999–00. The price index has been constructed on the assumption that prices remained constant in this year. The ACCC considers this would represent a conservative approach in that it is more likely for prices to have declined. For instance, across the market, the price of retail PSTN services declined 7 per cent in that year.¹⁴¹

Average prices were derived from revenue and quantity data sourced from Telstra's RAF reports, with the following exceptions:

- average prices for Telstra's retail and wholesale local calls and for retail and wholesale line rentals were derived from Telstra's Annual Report data—necessary quantity and revenue data were unavailable within the RAF reports¹⁴²
- payphone services were included in the index on the assumption that prices had not changed—the assumption is considered reasonable or conservative because
 - there is a binding price cap on local calls that are made from payphones
 - more recently, Telstra notes that its payphone business has been subject to increasing competition due to new market entrants, calling card operators and indirect competition from increased mobile telephone use.¹⁴³

¹³⁸ For earlier years, see Telstra, *2003 Annual Report*, 30 September 2003, pp. 10, 77; Telstra, *2002 Annual Report*, 30 September 2002, pp. 38, 79; Telstra, *2000 Annual Report*, 2000, p. 92.

¹³⁹ Telstra, *2004 Annual Report*, 13 September 2004, p. 83.

¹⁴⁰ Telstra, *2004 Annual Report*, 13 September 2004, p. 39.

¹⁴¹ ACCC, *Changes in Prices Paid for Telecommunications Services in Australia 2002-03*, May 2004, p. 113.

¹⁴² Over the five year period of the study, total revenue for these services reported under the RAF and in the Annual Reports correspond.

¹⁴³ Telstra, *2004 Annual Report*, 13 September 2004, p. 42.

Table A. 9 Revenue data used in the fixed line price index

Year	LRR	LCR	NLDR	FTMR	IDDR	ISDNR	BBR	UCLLR	DPSTNR
1999-2000	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

Table A. 10 Quantity data used in the fixed line price index

Year	LRN	LCN	NLDN	FTMN	IDDN	ISDNN	BBN	UCLLN	DPSTNN
1999-2000	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2000-01	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2001-02	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2002-03	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
2003-04	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

Notes for Tables A.9 and A.10:

- LR means line rentals, LC is local calls, NLD is national long distance, FTM is fixed-to-mobile calls, IDD is international calls, BB is Asymmetric Broadband, UCLLN is unconditioned local loop and DPSTN is domestic PSTN originating and terminating.
- R at the end of all the variables means revenue and N means quantity.
- DPSTN quantity data for the first year was calculated on the basis of revenue for the year and price observed in 2000–01.
- ISDN quantity for the first two years was calculated from RAF revenue and ISDN average price in 2002-03.

A.3 TFP measures for the price-capped services

A.3.1 The basic data

The ACCC has measured the TFP change for Telstra's price-capped services using data for the period 1999–00 to 2003–04.

Scope

The price-capped services comprise the following retail products that Telstra supplies:

- Line rentals
- Local calls
- Domestic long-distance calls
- Fixed-to-mobile calls
- International long-distance calls

Data sources

With some exceptions noted below, all data for the study (except the price indexes and elements of the user cost of capital) are sourced from Telstra's RAF reports. The RAF provides details of revenue, quantity and disaggregated cost data for the fixed-line products and other services.

Output index

The Tornquist Index procedure was used to construct the output index. The output index is made by aggregating growth rates of all outputs while revenues from individual services are used as weights.

The output index is represented by the physical quantity data for the individual services. Physical quantity data was taken from the RAF reports for all years except 1999–00 when RAF quantity data were unavailable—for this year, Telstra Annual Report quantities were used.

The local call quantity data as recorded in the RAF for the period to 2002–03 includes local calls supplied as part of the local carriage service—that is, wholesale local calls. In 2003–04, however, these wholesale local calls were excluded from reported RAF local call quantity. As a result, the decline in the quantity of local calls in 2003–04 is greatly overstated, roughly corresponding with the estimated number of LCS local calls that were supplied.¹⁴⁴

¹⁴⁴ The RAF reports a 19 per cent reduction in local calls in 2003–04—against this, Telstra estimates that resale of its local telecommunications services as at 30 June 2004 had a market share of 18 per cent, refer Telstra, *Annual Review 2004*, 13 September 2004, p. 9.

On the other hand, inclusion of wholesale local calls within the RAF data in previous years would be expected to understate the rate of decline in retail local calls, as it is understood that wholesale local calls as a percentage of all Telstra supplied local calls has increased gradually over the period.¹⁴⁵ That said, the ACCC considers that use of the RAF local call quantities will lead to more conservative TFP results being reported overall.

Input index

Like the output index, the input index was constructed using the Tornquist Index procedure. The index is made by aggregating growth rates of all inputs, the respective cost shares being used as weights for aggregation purposes. The input index includes all operation and maintenance costs due to the price-capped services. It also includes the deflated value of capital assets sourced from the RAF fixed asset statements while user cost of capital was used as weight for capital input.¹⁴⁶

The operation and maintenance costs were deflated by the CPI adjusted for the effect of the GST. The adjustment was made by deducting from the 2001 CPI the one-off impact of the introduction of the GST as estimated by the Commonwealth Treasury—this is 2.5 percentage points.¹⁴⁷

While some components—such as labour costs—are more likely to have increased in line with unadjusted CPI, other components are more likely to have increased in line with the adjusted CPI. As such, use of the adjusted CPI would tend to overstate operation and network cost inputs and hence represents a conservative approach.

The capital input was deflated alternatively by the capital price index (KPI) sourced from the ABS client service and capital price deflator for communications services (KPIL).

Data characteristics

As noted previously, external wholesale costs and capital data have grown at a disproportionately faster rate than wholesale output. To the extent that this is due to inappropriate cost re-allocations from the price-capped services to wholesale services, the reported results will be overstated. This issue does not arise in respect of the fixed-line infrastructure study, as there both retail and wholesale services are considered.

Also, RAF local call quantity data included wholesale local calls for initial years but excluded these for 2003–04. This will tend to understate the rate of decline in the quantity of retail local calls in initial years, and greatly overstate the rate of decline in

¹⁴⁵ Telstra estimates that the market share of resale of its local telecommunications services has increased by 2 per cent a year since 30 June 2002. Refer Telstra, *Annual Review 2002*, September 2002, p. 10; Telstra, *Annual Review 2003*, September 2003, p. 11; Telstra, *Annual Review 2004*, September 2004, p. 9.

¹⁴⁶ See Table A.8 for details of user cost of capital.

¹⁴⁷ See footnote 133.

2003-04. Overall this tends to overstate the rate of decline in local calls and leads to more conservative TFP measures being derived.

A.3.2 Results

TFP measures for Telstra's price-controlled services are presented in Table A.11.

These measures have been derived on the basis of using KPI as deflator for the value of capital assets.

The table shows that price-capped services output has declined over the period, but that total input use has fallen substantially, resulting in TFP growth at an average annual compound rate of 8.3 per cent over the period 1999-00 to 2003-04.

Table A.11 TFP measures for Telstra's price capped services—KPI deflator

Year	Output	Input	TFP	Δ TFP
1999-00	1.000	1.000	1.000	
2000-01	0.979	0.831	1.178	17.8%
2001-02	0.988	0.776	1.273	8.1%
2002-03	0.982	0.705	1.393	9.4%
2003-04	0.940	0.683	1.376	-1.2%
Comp Δ% 2000-04	-1.5%	-9.1%	8.3%	

- Comp Δ% means average annual compound growth rate.

As noted above, an additional measure has been derived on the basis of using the alternative price index for capital input (KPIL) for sensitivity testing.

The results of this sensitivity test are presented in Table A.12. The difference between the TFP measures are due to changes in inputs that result when using KPI and KPIL respectively. Table A.12 shows that total input use has still fallen, but by a lesser amount than in Table A.11. This results in TFP growth at an average annual compound rate of 7.0 per cent over the period 1999-00 to 2003-04.

Table A.12 TFP measures for Telstra’s price capped services—KPIL deflator

Year	Output	Input	TFP	Δ TFP
1999-00	1.000	1.000	1.000	
2000-01	0.979	0.852	1.149	14.9%
2001-02	0.988	0.812	1.217	5.9%
2002-03	0.982	0.738	1.331	9.4%
2003-04	0.940	0.718	1.309	-1.6%
Comp Δ2000-04	-1.5%	-7.9%	7.0%	

- Comp Δ% means annual average compound growth rate.

A.3.3 Conclusions and summary

The TFP results presented in this study are based mainly on the revenue, quantity and cost data provided in Telstra’s RAF reports, converted into output and input indexes by appropriate indexing. Changes in physical quantities form the output index and changes in the aggregate deflated operating and maintenance costs and capital input form the input index. The Tornquist indexation procedure, an annually-chained index, has been used for aggregating growths in both inputs and outputs.

As in the case of fixed-line services, annual changes in some variables used in the study appear unusual—in particular, external wholesale costs and capital data increase disproportionately more than external wholesale output. If this represents an inappropriate re-allocation of costs, the results will be overstated. On the other hand, RAF reported data have included wholesale local calls for some periods, but generally use of the RAF reported local call data is considered to give a conservative result.

The ACCC concludes that TFP of the price-capped services has been growing and that Telstra’s RAF reports show this to be at an annual average rate of approximately 8.3 per cent over the period 1999–00 to 2003–04.

A.4 Estimates of TFP measures for Telstra

A.4.1 The basic data

The ACCC has measured TFP for all of Telstra’s business units. This study has been undertaken for information only. The analysis has been conducted for the period from 1999–00 to 2003–04 having regard to actual data, and for the period 2004–05 to 2006–07 on the basis of projections that Telstra has made.

Data sources

With some exceptions, all data for this study (except the price indexes and elements of the user cost of capital) are sourced from information that Telstra made available to the ACCC for the purpose of conducting this analysis. Additional data has been sourced from Telstra’s Annual Reports.

Output index

The Tornquist Index procedure—an annually chained index—was used to construct the output index. The output index is made by aggregating growth rates of all outputs while revenues from individual services are used as weights.

Revenue derived from sale of assets was deducted from the total revenue data that Telstra provided. Telstra’s other revenue was deflated by the telecommunications component in the CPI. The other revenue was calculated as total revenue (as adjusted above) minus revenue derived from services for which quantity data are available.

Input index

Like the output index, the input index was constructed using the Tornquist Index procedure. The index is made by aggregating growth rates of all inputs, the respective cost shares being used as weights for aggregation purposes. The input index includes full-time equivalent of labour, capita and other costs including all operation and maintenance costs.

Telstra’s total cost (TC) data were adjusted to remove the following costs as given in Telstra’s Annual Reports:

- Net book value (NBV) of assets sold
- Bad debts
- Reductions in value of JV investment
- Interest cost.

Telstra’s ‘other cost’ was calculated as TC (as adjusted above) minus labour cost, depreciation and amortisation costs.

In order to estimate Telstra’s capital input, a perpetual inventory method (PIM) was used. The PIM is summarised as:

$$S_{jt} = S_{jt-1}(1 - d_j) + I_{jt} - R_{jt} \quad (2)$$

where:

S_{jt} is the end of period real capital stock of asset class j in period t

d_j is the declining balance rate of economic depreciation on asset class j ¹⁴⁸

I_{jt} is real investment in asset class j in period t

R_t is real retirements in asset class j in period t .

¹⁴⁸ A depreciation rate of 10.4 per cent was assumed.

Telstra's total assets were divided into classes, physical equipment (PPE) and software (SOFT), to construct an aggregate capital input.

Telstra's TC for the forecast period was allowed to change in line with the changes in the projected labour and the PIM capital input, and was allowed to escalate in line with the CPI.

For the period from 1999–00 to 2003–04, the other costs were deflated by the CPI adjusted for the effect of the GST. The adjustment was made by deducting from the 2001 CPI the one-off impact of the introduction of the GST as estimated by the Commonwealth Treasury—this is 2.5 percentage points.¹⁴⁹ For the projected period, it was assumed that the index increased at 2.0 per cent per annum.

For the period from 1999–00 to 2003–04, the capital input was deflated by the capital price index (KPI) sourced from the ABS client service—the ABS uses this index in order to deflate capital construction activities in the telecommunications industry. The ABS client service index information is not publicly available.

In terms of a publicly available index, a capital price deflator for communications services (KPIL) can be derived from the 2003–04 National Accounts¹⁵⁰. The derived index is not specific to the telecommunications industry—it would for instance include postal services. That said, in this study the index derived from the National Accounts has been used for sensitivity testing and the results are presented.

For the projected period, the indexes were then assumed to grow at an annual rate of 2.0 per cent.

The user cost of capital (as defined in Table A.8) is used as the weight for capital input.

A depreciation rate of 10.4 per cent was assumed¹⁵¹ for the PPE component of assets and an amortisation rate was calculated from actual amortisation cost and SOFT capital input provided by Telstra.

A.4.2 Results

As can be seen from Table A.13, TFP for the whole-of-Telstra grew at the rate of 6.4 per cent per annum for the period from 1999–00 to 2003–04 while for the period from 2003–04 to 2006–07 it is expected to grow at the annual rate of 8.2 per cent.

¹⁴⁹ See footnote 133.

¹⁵⁰ Australian Bureau of Statistics, *2003-04 National Accounts*, Catalogue no. 5204.0, Table 71.

¹⁵¹ The ACCC understands that Telstra uses this rate in its own TFP calculations.

Table A.13 TFP measures for whole-of-Telstra—KPI deflator

Year	Output	Input	TFP	Δ TFP
1999-00	1.000	1.000	1.000	
2000-01	1.042	0.883	1.180	18.0%
2001-02	1.041	0.908	1.147	-2.8%
2002-03	1.047	0.871	1.202	4.8%
2003-04	1.074	0.837	1.283	6.8%
2004-05	1.106	0.822	1.345	4.8%
2005-06	1.155	0.782	1.477	9.9%
2006-07	1.204	0.740	1.626	10.1%
Comp Δ2000-04	1.8%	-4.3%	6.4%	
Comp Δ2004-07	3.9%	-4.0%	8.2%	

- Comp Δ means annual compound growth rate.

Sensitivity Check

As noted above, an additional measure has been derived on the basis of using the alternative price index for capital input (KPIL) for sensitivity testing.

Table A.14 presents the results estimated when the KPIL is used to deflate the capital input. The table shows that inputs have still declined but by a lesser amount, resulting in lower TFP estimates. On this basis, TFP grew at the rate of 5.9 per cent per annum for the period from 1999–00 to 2003–04 while for the period from 2003–04 to 2006–07 it is expected to grow at the annual rate of 8.3 per cent.

TFP growth rates for the forecast period are almost the same irrespective of using KPI or KPIL as deflator for capital input. This is not unexpected as both the indexes were assumed to grow at the same annual rate of 2.0 per cent over the period.

Table A.14 TFP measures for whole-of-Telstra—KPIL deflator

Year	Output	Input	TFP	Δ TFP
1999-00	1.000	1.000	1.000	
2000-01	1.042	0.894	1.166	16.6%
2001-02	1.041	0.925	1.126	-3.4%
2002-03	1.047	0.888	1.178	4.6%
2003-04	1.074	0.855	1.257	6.7%
2004-05	1.106	0.839	1.318	4.8%
2005-06	1.155	0.797	1.448	9.9%
2006-07	1.204	0.755	1.595	10.1%
Comp Δ2000-04	1.8%	-3.8%	5.9%	
Comp Δ2004-07	3.9%	-4.1%	8.3%	

- Comp Δ means annual compound growth rate.

A.4.3 Conclusions and summary

The TFP results presented in this study are based mainly on data provided by Telstra for the purposes of the study, converted into output and input indexes by appropriate indexing. Changes in physical quantities and deflated ‘other’ revenues form the output index, and changes in physical quantities and deflated ‘other costs’ and capital input form the input index. The Tornquist Indexation procedure, an annually-chained index, has been used for aggregating growths in both inputs and outputs.

The ACCC concludes that TFP for the whole-of-Telstra has grown at an annual average rate of approximately 6.4 per cent over the period 1999–00 to 2003–04. For the period 2004–05 to 2006–07, it is projected that TFP for the whole-of-Telstra will grow at around 8.2 per cent.

A.5 Economy-wide TFP

ABS estimates of the economy-wide multi-factor productivity (MFP) are taken to represent TFP growth rates for the economy as a whole. Table A.15 shows that, over the period from 1998–99 to 2003–04, the annual average growth rate of the economy-wide MFP was a little over three quarter of one per cent. In line with common practice, the ACCC has rounded this estimate up to the nearest point—one per cent.

Table A.15 Economy-wide multi-factor productivity, 1999–2004

Year	Productivity index	Growth Rates
1998-99	98.0	
1999-00	97.6	-0.4%
2000-01	96.4	-1.2%
2001-02	99.2	2.9%
2002-03	100.0	0.8%
2003-04	102.2	2.2%
Average	0.84%	

▪ Source: ABS Catalogue Number 5204.0.

A.6 Anticipated developments expected to influence Telstra’s productivity performance

In deciding on an appropriate level of ‘X’ the ACCC has considered both the historical record on fixed-line TFP growth—suggestive of annual average growth of around 5.6 per cent, and the likely course of TFP growth for the proposed price-control period, 2005–06 to 2007–08. In looking forward, consideration needs to be had both to prospective output and input movements.

With respect to fixed-line outputs, the historic data period reveals a small overall increase in the total of outputs, but with a marked change of composition away from traditional PSTN retail outputs towards external wholesale and copper-based broadband.

While the number of basic access lines increased slightly,¹⁵² traditional call products (local calls, domestic long-distance and international) have all decreased in quantity. Fixed-to-mobile call volume has increased very substantially, partly riding on FTM substitution. External wholesale outputs more than doubled over the data period, and now account for 12 per cent of output. ISDN output (around 8 per cent of output) increased slightly over the entire period, but has now stabilised. ADSL-based broadband output has gone from zero to a substantial and rapidly-growing component of fixed-line outputs (around 900 000 lines as at 30 September 2004).¹⁵³

Looking forward to the proposed price-control period, the ACCC expects that the fixed-line infrastructure will continue to exhibit similar trends to those in the period

¹⁵² Annual Report data suggest a small increase in the total number of SIOs until 30 June 2003, followed by a very small decline over 2003–04, but with the 30 June 2004 total still being substantially above that on 30 June 1999.

¹⁵³ ACCC, *Snapshot of Broadband Deployment as at 30 September 2004*, p. 2.

from 1999–2000 to 2003–04—a slow decline in traditional outputs, further increases in FTM and a rapid increase in broadband outputs.

Traditional PSTN and ISDN retail outputs will continue to decline, and this is likely to occur no more rapidly than in the past few years.¹⁵⁴ The decline in Telstra’s retail outputs will be partially offset by continued increases in external wholesale outputs, although perhaps not as rapidly as in the past. ISDN output—which had grown in the historical data period—is also likely to decline slowly. On the other hand, broadband (DSL) outputs are generally forecast to increase rapidly, including by Telstra.¹⁵⁵

On balance, given the larger numerical weight of traditional outputs and a likely continuation in their rate of decline, it is unlikely that output growth from broadband and FTM will more than outweigh the decline in traditional outputs. Therefore, the ACCC expects that output of the fixed-line infrastructure is likely to remain roughly constant, compared with a very small increase in the historical data period.

Inputs into the fixed-line infrastructure have been falling consistently over the period of the ACCC’s study, driven by reductions in capital, labour and other inputs. Over the ACCC’s data period these input reductions have driven TFP growth far more than output increases.

Looking forward, one view is that the ‘easy pickings’ have been made and the rate of progress will slow. This is certainly the view of Telstra as presented in its submission on the draft report, which claims that Telstra is converging to world’s best practice and that ‘catch-up gains’ are no longer possible.¹⁵⁶ However, this was what Telstra argued in 2001, and the historical record has proved that prediction to be overly pessimistic.¹⁵⁷ The ACCC regards present concerns as likely to be overly cautious and inconsistent with statements about its productivity made elsewhere.

In recent years Telstra has implemented a succession of cost cutting plans under its ‘Sigma’ program, and these are continuing. As described by Telstra spokespersons to the Senate Communications Committee in 2003, Telstra is pursuing a wide variety of continuing initiatives to meet demands ‘that we improve our productivity by between

¹⁵⁴ Goldman Sachs JBWere has revised its forecasts down, but still has the number of fixed lines falling by only 2.5 percentage points (all from abandoning second lines) over the proposed price control period. Refer Goldman Sachs JB Were, *Telstra Corporation Limited*, 18 January 2005.

¹⁵⁵ See, for example, Telstra, *Telstra Achieves Broadband Milestone*, media release, 18 October 2004, and Telstra, *ADSL Rollout Gives More Australians Access to Broadband Advantages*, media release, 11 January 2005.

¹⁵⁶ See Telstra, *Response to ACCC Draft Report Review of Retail Price Controls*, 3 December 2004, p. 8.

¹⁵⁷ Telstra has disputed this, and—as noted elsewhere—appears to have approximately halved its historic estimate of whole-of-Telstra TFP growth. To the ACCC’s knowledge, Telstra has not estimated TFP growth for the fixed-line infrastructure.

five and 10 per cent a year'.¹⁵⁸ These initiatives relate, *inter alia*, to employment reduction, contracting out, and lower capital expenditure.

Telstra has recently unveiled its future network evolution and product strategy in which it identifies cost savings in respect of its fixed-line network of around \$110 million being realised over the next two years.¹⁵⁹ In the UK, British Telecom has identified significantly larger cost savings from similar initiatives.¹⁶⁰

An additional cost-reducing factor in the next three years is likely to flow from reductions in mobile termination charges, which have fallen only a little over the ACCC's data period. Were these to fall as suggested by the ACCC's indicative prices (at three cents per minute per year), the annual savings would be over \$70 million per annum.¹⁶¹ This alone is equivalent to almost one percentage point of TFP.

In summary the ACCC believes that while Telstra is unlikely to achieve any appreciable output growth from its fixed-line infrastructure, input reduction is likely to continue at the same rate as earlier. This would result in TFP growth slightly less than that experienced in the past few years.

A.7 Summary and conclusions

This attachment discusses a number of issues relevant to the CPI – X per cent price cap formula should the Government decide to continue to apply this form of price control arrangement to Telstra.

The ACCC considers that X should be set having regard to reasonably anticipated productivity improvements informed by observed TFP performance and anticipated developments that would influence future performance.

In estimating Telstra's TFP performance, the ACCC has used Telstra data and adopted a conservative approach.

The ACCC's analysis concludes that the TFP for the fixed-line infrastructure over which the price-capped services are supplied has grown over the period from 1999–00 to 2003–04 at around 5.4 per cent, and that for whole-of-Telstra has grown at around 6.4 per cent.

¹⁵⁸ Transcript of Mr Anthony Rix and Mr Bill Scales, Australian Senate, Environment, Communications, Information Technology and the Arts References Committee, Reference: Australian Telecommunications Network, 19 May 2003, pp. 757-773.

¹⁵⁹ Telstra, *Telstra unveils Future Network Evolution and Product Strategy*, media release, 22 July 2004.

¹⁶⁰ BT, *21century_network.ppt*, presented 16 June 2003, accessed 13 October 2004, <www.btplc.com/News/Presentations/Generalpresentations/21stcenturyBT.htm>.

¹⁶¹ This is based on 4 500 million FTM minutes, 55 per cent of which go to external mobile carriers (Optus, Vodafone and Hutchison) according to Telstra's market share.

Higher TFP estimates are derived for the price-capped services alone on the basis of Telstra's RAF returns. However, the basis of cost allocation between retail and wholesale services is unclear and some caution should be applied in relying on these estimates.

Over the same period, the productivity of the economy as a whole has grown at around one per cent. Subtracting the economy-wide TFP average growth rate results in a 'net' TFP growth of around 4.4 per cent per annum for the fixed-line infrastructure.

Based upon current information, various factors can be expected to influence the future TFP growth of the fixed-line infrastructure and the price-capped services. It is not known the precise effect that these factors will have other than that some will tend to improve productivity and others will lessen it. Other factors may emerge. Overall, however, it is considered reasonable to expect that future productivity improvements will be consistent with the conservative measures derived in respect of the preceding period.

Based on the considerations discussed above, and having regard to the uncertainty involved in predicting future TFP performance, the ACCC believes that it would be reasonable to set an X in order of 4 per cent to a broad basket of price-capped services.

In summary, the following recommendations are made in respect of setting a price cap in respect of the broad basket of services:

- the price cap should take the form of a CPI-X formula
- the ACCC believes that an X in the order of 4 per cent per annum is appropriate having regard to conservatively measured TFP performance in the period from 1999-00 to 2003-04 and having regard to factors that would reasonably be expected to influence this performance in the next price control period
- the preferred option is to continue with the historical eight capital average CPI recorded in the year to the previous March quarter.

Attachment B Other existing schemes for low-income and vulnerable consumers

The following table summarises some of the low-income and vulnerable user schemes available for telecommunications consumers overseas, and for customers of other Australian utilities.

Table B.1 Other low-income and vulnerable user schemes

Country / State	Industry	Scheme details
Ireland	Telecoms	Vulnerable user scheme. ¹⁶² Customer gets line rental and €5 worth of calls for €23.65 per month. Once the €5 worth of calls is used up, user pays double the usual rates for the next €6 worth of calls. Caller will therefore not be more than €1 a month worse off under the scheme.
UK	Telecoms	Light user scheme. ¹⁶³ Eligible consumers get a rebate on line rental as long as they spend less than £15.07 a quarter on calls. The amount of the rebate increases as the call bill gets smaller.
USA	Telecoms	Lifeline. ¹⁶⁴ A federally funded scheme where carriers are reimbursed for providing discounts on monthly phone bills. The scheme allows low-income consumers to save at least \$5.25 a month and up to \$10.00 a month off their monthly phone bills. Some US states (e.g. Nebraska ¹⁶⁵ , New Jersey ¹⁶⁶ , Tennessee ¹⁶⁷) provide additional support up to \$3.50.
USA	Telecoms	Linkup. ¹⁶⁸ Provides savings of up to 50% of the installation fees of a new line, up to \$30.

¹⁶² Comreg, *Information Notice –Vulnerable User Scheme*, Document 03/48, 2 May 2003, viewed 12 January 2005 <www.comreg.ie/_fileupload/publications/ComReg0348.pdf>

¹⁶³ BT, *Light User Scheme*, viewed 12 January 2005, <www.bt.com/Pricing/index.jsp>. Follow the Residential – Other Call Schemes – Light User Scheme links.

¹⁶⁴ Universal Service Administration Company, *Lifeline*, 13 August 2004, viewed 12 January 2005, <www.lifelinesupport.org/li/components/lifeline.asp>.

¹⁶⁵ Nebraska Public Service Commission, *Nebraska Telephone Assistance Program*, viewed 12 January 2005, <www.psc.state.ne.us/home/NPSC/usf/ntap_usf/ntap_usf.html>.

¹⁶⁶ New Jersey Board of Public Utilities, *New Jersey Telephone Assistance Programs*, 2 September 2004, viewed 12 January 2005, <www.bpu.state.nj.us/home/TelephoneAssistance.shtml>.

¹⁶⁷ Tennessee Regulatory Authority, *TRA Telephone Assistance Programs*, viewed 12 January 2005, <www.state.tn.us/tra/teleassist.htm>.

¹⁶⁸ Universal Service Administrative Company, *Linkup*, 13 August 2004, viewed 12 January 2005, <www.lifelinesupport.org/li/components/linkup.asp>.

Tasmania	Energy	Pensioner Concession. ¹⁶⁹ Flat rebate to pensioners of 48.4c a day on their electricity bill. Pensioners also receive a \$56 a year heating allowance. HCC holders get the 48.4c a day rebate for five months of the year.
Victoria	Energy	Network Tariff Rebate. ¹⁷⁰ 1.3c/kwh rebate automatically credited to low usage customers in outer metro, rural and regional areas to compensate for high distribution costs.
Victoria	Energy	Winter Energy Concession. ¹⁷¹ Discount of 17.5% off two mains electricity bills and three mains gas bills received between mid-May and mid-November. Off-peak concession. 13% discount on off-peak rates.
South Australia	Energy	Energy Concession. ¹⁷² Pensioners, and low-income consumers with dependants, receive \$120 a year off their energy bill.
NSW	Energy	Pensioner Energy Rebates. ¹⁷³ Pensioners receive \$112 a year rebate on their electricity and gas bills.
Victoria	Water	Water and Sewerage Concessions. ¹⁷⁴ 50% off water and sewerage charges, up to \$150 maximum.
NSW	Water	Pensioner rebates. ¹⁷⁵ Pensioners receive rebates of 100% of their quarterly service charge for water, up to \$19.40, 74% of the quarterly service charge for sewerage and 50% of their quarterly service charge for stormwater.
Queensland	Electricity	Queensland government electricity rebate. ¹⁷⁶ Rebate of \$9.33 a month on home electricity bill.

¹⁶⁹ Aurora Energy, *Electricity discounts*, 2004, viewed 12 January 2005, <www.auroraenergy.com.au/forhome/bills_concessions.html>.

¹⁷⁰ Department of Infrastructure, *Network Tariff Rebate*, 25 November 2004, viewed 12 January 2005, <<http://www.doi.vic.gov.au/doi/internet/Energy.nsf/HeadingPagesDisplay/Distribution+and+retail>>. Follow the Network Tariff Rebate link.

¹⁷¹ Department of Human Services, *Victorian State Concessions*, 25 February 2003, viewed 12 January 2005, <www.dhs.vic.gov.au/concessions/Guide2003/g_energy.htm>.

¹⁷² Children, Youth and Family Services, *Energy Concession*, 20 August 2004, viewed 12 January 2005, <www.dfc.sa.gov.au/financial/c_electricity.asp>.

¹⁷³ Department of Energy, Utilities and Sustainability, *Energy Concessions*, viewed 12 January 2005, <www.deus.nsw.gov.au/ec/index.htm>.

¹⁷⁴ Department of Human Services, loc. cit.

¹⁷⁵ Sydney Water, *Rebates and Social Policy 2004-2005*, viewed 12 January 2005, <www.sydneywater.com.au/Publications/_download.cfm?DownloadFile=FactSheets/RebatesAndSocialPolicy.pdf>.

¹⁷⁶ Queensland Government, *State Government Concessions*, 10 August 2004, viewed 12 January 2005, <www.communities.qld.gov.au/community/concessions/brochure/stategovt/electricity.html>.

Attachment C Public consultation

The ACCC received submissions from many interested parties in response to its discussion paper that it released in June 2004 and the draft paper that it released in November 2004. The ACCC would like to thank those who made submissions for their time and valuable contribution to this paper.

The ACCC also conducted a series of public meetings in 12 locations in Australia—including metropolitan, regional and remote locations. The meetings provided an opportunity for community groups and individuals, who may not have otherwise had the opportunity, to participate in the open discussion of the issues. Further, by travelling to a number of different locations, the ACCC gave people from different geographic areas an opportunity to participate in the ACCC's review of the price control arrangements.

The ACCC would like to thank all parties that contributed to the public meetings. The ACCC also wishes to recognise that many people who attended public meetings in regional areas may have travelled significant distances to contribute.

C.1 Submissions on the draft paper

The ACCC received public and confidential submissions in response to the draft paper. Public submissions were received from:

AAPT
Anglicare Tasmania
Australian Consumers' Association
Competitive Carriers' Coalition (CCC)
Consumer Law Centre Victoria
Consumers' Telecommunications Network (CTN)
Hutchison
Duncan Kerr, MP
Low-income Measures Assessment Committee (LIMAC)
Optus
Payphone Industry Association
Telstra
Virgin Mobile Australia
J Bondin
J Carter
P Evans
M Fowler

C.2 Submissions on the discussion paper

The ACCC received public submissions from the following interested parties in response to the discussion paper:

AAPT
Australian Consumers' Association
Australian Telecommunications Users Group (ATUG)
Competitive Carriers' Coalition (CCC)
Consumers' Telecommunications Network (CTN)
Hutchison Telecommunications
Optus
The Smith Family
Telstra
Vodafone
Western Australian Department of Industry and Resources (WA Government)
Mr J Bondin
Mr J Carter
Mr P Evans
Mr M Fowler
Ms D Pergolotti
Ms R Williams

C.3 Public meetings

The locations and dates of the public meetings conducted by the ACCC are listed below:

Cairns	23 August 2004
Brisbane	23 August 2004
Canberra	24 August 2004
Wagga Wagga	24 August 2004
Sydney	26 August 2004
Dubbo	27 August 2004
Hobart	30 August 2004
Melbourne	31 August 2004
Adelaide	31 August 2004
Perth	1 September 2004
Darwin	2 September 2004
Alice Springs	3 September 2004

**Attachment D Analysis of expenditure on Telstra
telephone services—report by NATSEM**

[commercial-in-confidence]