



**Australian
Competition &
Consumer
Commission**

Review of the Line Sharing Service Declaration

Final Decision

October 2007

Abbreviations

ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric digital subscriber line
CAN	Customer access network
CSP	Carriage service provider
DSLAM	Digital subscriber line access multiplexers
FTTN	Fibre-to-the-node
HFC	Hybrid fibre-coaxial cable
IP	Internet protocol
LSS	Line-sharing service
LTIE	Long-term interests of end-users
MSAN	Multi-Service Access Node
MDF	Main distribution frame
POI	Point of interconnection
PSTN	Public switched telephone network
PSTN OTA	PSTN originating and terminating access
SAO	Standard access obligation
TPA	Trade Practices Act 1974 (Cth)
TSLRIC	Total service long run incremental cost
ULLS	Unconditioned local loop service
VoIP	Voice over Internet protocol
WLR	Wholesale line rental
xDSL	Refers to the 'family' of Digital Subscriber Line services (eg. ADSL, HDSL etc.)
LCS	The local carriage service is a service for the carriage of telephone calls from customer equipment at an end-user's premises to separately located customer equipment of an end user in the same standard zone. The service is used by competitors to resell local calls.
LSS	The line-sharing service allows similar functionality to a ULLS service to a competitor, but where the voice service is still provided by another party.
PSTN OTA	Domestic PSTN originating access is the carriage of telephone calls from the calling party (the A-party) to a point of interconnection (POI) with an access-seeker's network. A POI is usually located at a trunk (or transit) exchange.

Domestic PSTN terminating access is the carriage of telephone calls from a POI within an access-seeker's network to the party receiving the call (the B-party).

ULLS

The unconditioned local loop service is the use of unconditioned communications wire between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at or associated with a customer access module and located on the end-user side of the customer access module.

Wholesale DSL services

Wholesale DSL services comprise both a local access component (analogous to ULLS) and a transmission component between DSL exchanges and CBD exchanges.

Wholesale line rental (WLR)

Wholesale line rental is a service providing line access to customers, but sold on a wholesale rather than retail basis.

Contents

SUMMARY	5
1. BACKGROUND	11
2. LONG TERM INTERESTS OF END-USERS (LTIE) TEST.....	19
2.1 <i>WILL DECLARATION PROMOTE COMPETITION?</i>	19
ACCC'S APPROACH TO ASSESSING THE STATE OF COMPETITION IN THE RELEVANT MARKETS	33
THE LEVEL OF COMPETITION IN THE RELEVANT MARKETS	36
IS DECLARATION OF THE LSS REQUIRED TO PROMOTE COMPETITION?	47
2.2 <i>WILL DECLARATION ACHIEVE ANY-TO-ANY CONNECTIVITY?</i>	57
2.3 <i>WILL DECLARATION ENCOURAGE THE ECONOMICALLY EFFICIENT USE OF, AND THE ECONOMICALLY EFFICIENT INVESTMENT IN, INFRASTRUCTURE?</i>	58
2.4 <i>CONCLUSION ON WHETHER DECLARATION OF THE LSS WILL PROMOTE THE LONG TERM INTERESTS OF END-USERS</i>	65
2.5 <i>CONCLUSION ON WHETHER TO CONTINUE, VARY OR REVOKE THE LSS DECLARATION</i>	67
3. PRICING PRINCIPLES.....	71
RELEVANT LEGISLATIVE MATTERS	71
2002 PRICING PRINCIPLES	72
EVENTS SINCE THE 2002 PRICING PRINCIPLES.....	73
3.1 <i>APPROPRIATE PRICING PRINCIPLES</i>	76
COST COMPONENTS	78
LINE COSTS.....	84
CONNECTION AND DISCONNECTION CHARGES	99
AVERAGING OR DE-AVERAGING	102
REVENUE EFFECT OF VoIP	103
3.2 <i>INDICATIVE PRICES</i>	103
3.3 <i>CONCLUSION</i>	109
APPENDIX 1: LINE SHARING SERVICE (LSS) DESCRIPTION.....	111
APPENDIX 2: LEGISLATIVE BACKGROUND.....	112
THE ACCESS REGIME.....	112
MAINTAINING, VARYING OR REVOKING AN EXISTING DECLARATION	112
THE ACCC'S APPROACH TO THE LTIE TEST	112
APPENDIX 3: SUBMISSIONS TO THE INQUIRY	118

Summary

Introduction

In April 2007, the Australian Competition and Consumer Commission ('ACCC') initiated an inquiry into the declaration of the Line Sharing Service ('LSS'), in accordance with sub-section 152ALA(7) of the *Trade Practices Act 1974* ('TPA'). The LSS declaration is due to expire on 31 October 2007.

The LSS is a service that allows access seekers to provide high-speed broadband services to end-users via access to the higher frequency part of the copper line, while the access provider supplies the underlying PSTN voice service over the same copper line. At this time, Telstra remains the sole supplier of the declared LSS to access seekers. Appendix 1 contains the LSS service description.

Appendix 2 outlines the legislative provisions relevant to the ACCC's consideration of whether declaration is to be continued, varied, revoked or allowed to expire without a new declaration being made.

The main focus of the inquiry is to assess whether declaration of the LSS, as currently described, would promote the long term interests of end-users ('LTIE') of carriage services, or of services supplied using carriage services ('listed services').¹

Section 152AB of the TPA provides that, in applying the LTIE test, the ACCC must consider the extent to which declaration is likely to result in the achievement of the following objectives.

- promoting competition in markets for listed services;
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.

The ACCC released a Discussion Paper in April 2007 as part of its *Fixed Services Review*.² The Discussion Paper sought submissions from interested parties on various issues relevant to whether the LSS should be declared, and if so, what pricing principles should be applied to the service. The ACCC received eleven submissions from industry parties in response to the Discussion Paper. On 21 August 2007, the ACCC issued its Draft Decision³ to extend the LSS declaration until 31 July 2009, on a national basis. The ACCC received eight submissions from industry parties in response to the Draft Decision. Appendix 3 to this paper contains a list of submissions in response to the Discussion Paper and Draft Decision. The views in those submissions have been taken into account in making the ACCC's Final Decision.

¹ For a more detailed guide to the ACCC's approach to declarations refer to the ACCC publication: *Telecommunications services – Declaration Provisions*, July 1999.

² See ACCC, *Fixed services review- a second position paper*, April 2007, Chapter 5.

³ ACCC, *Review of the Line Sharing Service Declaration, Draft Decision*, August 2007.

Background

The ACCC originally declared the LSS in August 2002 on the basis that the declaration would likely be in the LTIE. The ACCC formed the view that that declaration had the potential to promote competition in the downstream markets for ‘high-speed data services’ as it would enable access seekers to compete with Telstra in downstream markets. In addition, the ACCC found that declaration of the LSS would likely encourage efficient investment in telecommunications infrastructure by both Telstra and access seekers.

As at September 2007, there were [c-i-c] LSS services being used by access seekers. While LSS take-up was initially slow, it has grown in the order of [c-i-c] per cent in the last two years. The ACCC understands that there are 10 to 20 access seekers currently using the LSS to provide high-speed broadband and voice services, via VoIP technology, to consumers.

In practice the LSS has been used by internet service providers (‘ISPs’) such as iinet and internode to be first to market high-speed broadband services via ADSL2+ technology. These access seekers have been able to fully utilise the functionality of the LSS to compete aggressively on the basis of high quality, differentiated retail broadband offerings. In turn, telecommunications providers, such as Telstra and Optus, have responded to these market developments by also offering ADSL2+ services to consumers. Thus, LSS-based competition has been effective in promoting rivalry, innovation and customer choice in the retail market for high-speed broadband services.

Since declaration, Telstra has twice submitted undertakings about the price of access to the LSS. Both undertakings were rejected by the ACCC on the basis that Telstra’s proposed prices were above the level considered reasonable by the ACCC. Telstra appealed the ACCC’s December 2005 decision to reject Telstra’s December 2004 monthly charge undertakings, in which Telstra had proposed a LSS monthly price of \$9, to the Australian Competition Tribunal. In June 2006 the Tribunal upheld the ACCC’s decision on the basis that it could not be satisfied that the terms and conditions of the undertaking were reasonable.⁴ Despite the Tribunal’s findings, Telstra did not alter its price offer to the market until December of 2006 when the ACCC issued interim determinations in relation to three LSS access disputes.

The ACCC is currently arbitrating six disputes in relation to the LSS and has recently concluded three other LSS access disputes. In these recently completed LSS access disputes and notwithstanding the Tribunal’s rejection of it as unreasonable, Telstra has continued to propose a LSS monthly charge of \$9. This remains considerably above the \$2.50 charge that the ACCC has prescribed in making its final determinations.⁵

In considering the LSS price, it should be noted that the LSS service description specifies that the LSS is only provided in association with the provision of an

⁴ Australian Competition Tribunal, *Telstra Corporation Limited (ACN 051 755 556)*, [2006] ACompT 4.

⁵ See for example ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, June 2007, published 8 August 2007, p. 26.

underlying PSTN voice service on the same line. This requirement ensures that the underlying costs of the LSS line are fully recovered. The \$2.50 charge for the specific cost of providing the LSS is a payment from access seekers to Telstra for only the use of the high frequency part of the line. However, in all cases Telstra also recovers money from the underlying voice band PSTN service. If the underlying voice service is provided at the retail level by another carrier, Telstra will receive wholesale line rental costs and wholesale call costs such as payments for the local carriage service. The ACCC's current indicative price for monthly wholesale line rental charges is \$23.12 (excl. GST) for residential users. Alternatively, if Telstra is the retail provider of the underlying voice service, it will receive retail line rental charges and call costs. The line rental charge for Telstra's most popular residential plan, HomeLine Plus, is \$27.23 (excl. GST). Accordingly, Telstra receives significantly more revenue from a LSS line than simply the LSS charge.

Telstra also lodged a High Court challenge contesting the validity of the LSS declaration in January 2007.

Furthermore, in August 2007, Telstra instituted judicial review proceedings under the *Administrative Decision (Judicial Review) Act 1977* in relation to the final determinations issued by the ACCC for three LSS access disputes.

Final Decision on whether declaration of the LSS is in the LTIE

Based on the information before it, the ACCC has formed the view that declaration of the LSS will likely promote the LTIE and that the expiry date for the LSS declaration should be extended until 31 July 2009, on a national basis.

A declaration period of until 31 July 2009 will enable the ACCC to review the declaration of the LSS as part of its proposed holistic review of fixed line services declarations commencing in mid 2008.

The reasons for the ACCC's decision are summarised below.

Promotion of competition

The ACCC is of the view that the LSS is an important input for the promotion of competition in the provision of downstream high-bandwidth carriage services. By allowing access to the high frequency portion of an unconditioned local loop, the LSS enables access seekers to compete over all downstream stages of the production process in the provision of high-speed broadband services.

The ACCC notes that there are wholesale/access services available as alternatives to the LSS for providing retail broadband services. These are available in various geographic areas of Australia. However, these supply options do not currently provide an effective substitute for the LSS in terms of underlying functionality and/or geographic coverage. Therefore the ACCC considers that reliance on these alternatives would limit an access seeker's ability to effectively compete across product-price-service package dimensions of broadband supply, compared to use of the LSS. In practice, innovation and consumer choice in the supply of high speed broadband services has been driven by access seekers, such as ISPs, using the LSS to deliver ADSL 2+ services to end-users.

The ACCC considers that the current structure of the market for the LSS confers significant and ongoing market power upon Telstra in the negotiation of terms and conditions for the service. At this time, Telstra remains the sole supplier of the LSS. Under these conditions, Telstra could withhold supply of the LSS or set prices at supra-competitive levels absent the declaration.

The ACCC considers that declaration of the LSS is likely to promote competition in the high-bandwidth carriage services market as this would lead to the eligible service being more likely to be provided on competitive terms and conditions. In turn, the ACCC believes this would lead to the promotion of the LTIE by ensuring access seekers are better able to compete with Telstra in downstream markets. This should generate lower prices for end-users and a greater range of better quality service offerings.

Declaration of the LSS may also assist in promoting competition in the downstream fixed voice services market by enabling access seekers to offer VoIP services to end-users. However, the ACCC notes that VoIP services are unlikely to represent a viable or widespread substitute to PSTN voice services at this time.

The ACCC recognises that communications markets are rapidly evolving and there are a number of potential developments that may increase the competitive constraints on Telstra as the sole LSS access provider. The ACCC is also mindful of the on-going need for robust empirical information as an input into its assessment of competition. In this regard, the ACCC, in March 2007, initiated a process under which it will collect (and regularly update) information regarding the nature and location of competing infrastructure in geographic areas of Australia.⁶ This information is intended to assist the ACCC in future considerations of Part XIC matters, including its proposed holistic review of fixed line services declarations.

Any-to-any connectivity

The ACCC is of the view that declaration of the LSS is consistent with the achievement of any-to-any connectivity.

Efficient investment

The ACCC considers that declaration will encourage efficient investment in infrastructure used to provide the LSS, and efficient use of infrastructure used to provide services in downstream markets.

Absent declaration, the ACCC has found that Telstra is likely to face little competitive constraint in setting prices at levels consistent with those expected in a competitive market. As a result, Telstra is less likely to face the correct incentives to price its services in ways which promote the efficient use of infrastructure. Declaration in such a situation should ensure access prices better reflect costs, thus providing appropriate signals for access seekers' build/buy decisions and more efficient investment in infrastructure.

⁶ ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

Declaration of the LSS is also likely to encourage efficient investment in infrastructure used to supply broadband services. The ACCC considers that, absent declaration, the ability of access seekers to acquire the LSS or to acquire it on reasonable terms and conditions would be constrained. This may also distort the incentives of access seekers to undertake efficient investment in infrastructure. The ACCC considers that Telstra's incentives to efficiently invest in replacement technologies to deliver broadband services should not be unduly affected by the declaration of the LSS.

Pricing principles

When the ACCC declares a service, the ACCC is also required, as soon as practicable, to determine pricing principles for the declared service, pursuant to section 152AQA of the TPA. Following the decision to extend the declaration of the LSS, the ACCC's LSS pricing principles are that:

- a TSLRIC+ pricing principle should be applied to the LSS;
- a specific cost component should be included in the LSS monthly price, calculated by combining 'LSS-specific costs' with 'ULLS-specific costs' and Telstra's internal equivalent costs for ADSL, and allocating those costs across the number of active ULLS, LSS and ADSL lines;
- a contribution for line costs will not be recovered in the LSS monthly price; and
- connection and disconnection charges should be set with reference to the amounts charged by third party contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.

The ACCC has issued indicative prices for the LSS to apply between 1 January 2008 and 31 July 2009. Those prices are:

	Charge
LSS monthly charge	\$2.50 per service (1 Jan 2008 to 31 Jul 2009)
LSS connection not made in a managed network migration	\$41.40 per connection (1 Jan 2008 until 30 Jun 2008) \$43.10 per connection (1 Jul 2008 until 31 Jul 2009)
LSS disconnection not made in a managed network migration	\$37.10 per connection (1 Jan 2008 until 30 Jun 2008) \$38.70 per disconnection (1 Jul 2008 until 31 Jul 2009) However a disconnection charge will not be payable where: <ul style="list-style-type: none"> ▪ the disconnection is made pursuant to the Telstra LSS churn process, or ▪ the access seeker is participating in the Telstra LSS churn process and Telstra (BigPond) is not

	participating in the Telstra LSS churn process
LSS managed network migration - fixed amount	\$134.50 per MNM (1 Jan 2008 until 30 Jun 2008) \$140.10 per MNM (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - variable amount	\$30.90 per connection (1 Jan 2008 until 30 Jun 2008) \$32.20 per connection (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - minimum charge	\$752.50 per exchange per MNM (1 Jan 2008 until 30 Jun 2008) \$784.10 per exchange per MNM (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - disconnection charge	\$0 (1 Jan 2008 to 31 Jul 2009)

Structure of the report

This report sets out the reasons for ACCC final decision. It is structured as follows:

Section 1 provides the background to the LSS

Section 2 examines whether the declared service should be continued, varied or revoked, with regard to the LTIE.

Section 3 outlines the pricing principles for the declared LSS.

Appendix 1 contains the LSS service description.

Appendix 2 outlines the legislative provisions relevant to the ACCC's consideration of whether declaration should be continued, varied or revoked.

Appendix 3 contains a list of parties that provided submissions to the ACCC's inquiry.

1. Background

What is Line Sharing?

Line sharing is where two separate carriers provide separate services over a single metallic pair (or 'line'). A metallic pair can support a broad range of services by utilising the full spectrum of the line. Traditionally, only 3.1 kHz, a relatively small part of a metallic pair's useable spectrum, was used to provide voice services. With the development of xDSL technology,⁷ the remaining part of the spectrum can now be used to provide a variety of broadband services. This allows a combination of low-speed and high-speed services to be provided on a single line at the same time.

Under line sharing, the metallic line spectrum is normally split (or shared) so that one carrier or service provider provides the voice services over the line, while another carrier provides high-speed broadband services through the use of its own xDSL technology. For example, if Telstra is the access provider, it could deliver voice services to end-users, while a second carrier simultaneously provides high-speed broadband services (such as ADSL) over the same copper line. Alternatively, an access seeker could deliver voice services to end-users at the retail level via use of Telstra wholesale telephony services such as Wholesale Line rental (WLR) and the Local carriage service (LCS).

Line sharing is also referred to as spectral unbundling, spectrum sharing or the shared local loop in overseas jurisdictions.

The LSS declared by the ACCC in 2002 and the subject of this inquiry refers to a specific form of line sharing. The Commission has adopted the following service description for the declared LSS as contained in the LSS description in Appendix 1:

The High Frequency Unconditioned Local Loop Service is the use of the non-voiceband frequency spectrum of unconditioned communications wire (over which wire an underlying voiceband PSTN service is operating) between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at, or associated with, a customer access module and located on the end-user side of the customer access module.

The LSS description specifies that the LSS is only provided in association with the provision of an underlying PSTN voice service on the same line. In this regard, the LSS monthly charge is a payment from access seekers to Telstra for only the use of the high frequency part of the line. However, in all cases Telstra also recovers money from the underlying voice band PSTN service. This structure ensures that the underlying costs of the LSS line are fully recovered. If the underlying voice service is provided at the retail level by another carrier, Telstra will receive wholesale line rental costs and wholesale call costs such as payments for the local carriage service. The ACCC's current indicative price for monthly wholesale line rental charges is \$23.12

⁷ xDSL refers to the 'family' of digital subscriber line services (e.g. ADSL=Asymmetric DSL, HDSL = High bit rate (or high-speed) DSL etc). For instance, ADSL uses a dedicated line from the customer premises to a network exchange to provide an 'always on' data service with downstream access speeds capable of over 1.5 Mbits per second and upstream speeds typically one quarter of the downstream rate. At the same time an independent public switched telecommunications network (PSTN) dial-up voice service is supported over the same line.

(excl. GST) for residential users. Alternatively, if Telstra is the retail provider of the underlying voice service, it will receive retail line rental charges and call costs. The line rental charge for Telstra's most popular residential plan, HomeLine Plus, is \$27.23 (excl. GST). Accordingly, Telstra receives significantly more revenue from a LSS line than simply the LSS charge.

The equivalent of the LSS is a regulated service in EU jurisdictions, while third party access obligations have been revoked in the US where intermodal competition between copper wire and cable networks is prevalent.

Previous LSS declaration inquiry (2001-02)

In 1999, during the Local Telecommunications Services Inquiry,⁸ the ACCC examined the concept of 'line sharing' when considering the case for declaration of the ULLS. At that time, however, the ACCC expressed the view that declaration of the ULLS should be reviewed separately to the LSS. In the declaration inquiry Final Report the ACCC stated:

Access seekers may, however, choose to "split" particular services (eg. voice and data services) and contract with a carrier for the transmission of particular types of services (eg. voice services) over that carrier's network. The wholesale arrangements would be matters for resolution by means of commercial negotiations and are not specified in the service description for the unconditioned local loop.⁹

Following the declaration of the ULLS, there were requests from participants in the telecommunications industry for LSS to be declared.¹⁰

In September 2001, the ACCC announced that it would conduct a public inquiry into whether or not a LSS should be declared under Part XIC of the TPA. The ACCC considered a particular form of line sharing which involved an access provider providing a voice-band PSTN service to an end-user, while providing access to another carrier (the access seeker) to simultaneously provide services to the same end-user over the high-frequency portion of the metallic wire.

In August 2002, the ACCC 'declared' the LSS on the basis that such a declaration would be likely to be in the LTIE.¹¹ Appendix 1 contains the relevant LSS service description. A summary of the ACCC's reasoning for deciding to declare the LSS is outlined below.

Promotion of competition – the ACCC was not convinced that, as the sole supplier of the LSS, Telstra's commercially agreed prices were necessarily consistent (or in the absence of declaration would remain consistent) with those that would best promote the LTIE. It also noted the concerns of some access seekers with regard to the non-price terms and conditions associated with the provision of Telstra's LSS.

⁸ ACCC, *Local Telecommunications Services – Inquiry Report*, July 1999.

⁹ *ibid*, para 3.4.5, p. 16.

¹⁰ On 19 April 2001 Cable and Wireless Optus Limited (Optus) sent a submission to the ACCC outlining why the LSS should be declared and also sent a proposal to the TAF at the same time. On 4 September 2001, the TAF advised the ACCC that it could not reach consensus on whether the LSS should be declared. The TAF referred the matter to the ACCC.

¹¹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. vi.

The ACCC formed the view that to the extent that declaration could help ensure more competitive terms and conditions were set for the LSS, it had the potential to promote competition in the downstream markets for ‘high-speed data services’ as it would enable access seekers to compete with Telstra in downstream markets on a more even footing. The ACCC considered that declaration of the LSS would have little or no impact on local telephony markets in the market environment that existed at that time.

Any-to-any connectivity – the ACCC considered that declaration of the LSS would have no direct impact on any-to-any connectivity of telecommunications services.

Efficient investment – the ACCC considered that, to the extent that the relevant pricing principles would enable access providers to recover the full costs of providing LSS (both ‘LSS-specific costs’ and the line costs over which the LSS is provided), declaration would be likely to encourage efficient investment in telecommunications infrastructure by both Telstra and access seekers.

Overall, the ACCC believed that declaration of the LSS would be likely to promote the LTIE.

Pricing Principles – the ACCC noted that its pricing principles suggested that efficiency in use may be better promoted under a pricing principle where some allocation of line costs was included in the price of a LSS. However, the ACCC also noted that Telstra already appeared to be fully recovering its line costs through revenues from other sources (including line rental charges, mark-ups on the price of other retail services provided over its PSTN network and the access deficit contribution included in the price of other interconnection services). Since 2000, Telstra had significantly increased line rental prices paid by consumers and businesses to recover line costs from line rental revenues.

Developments since 2002

LSS take-up since 2002

Under the current regulatory framework, access seekers are able to combine the LSS with their own infrastructure (eg. DSLAMs or MSANs¹²) to provide high-speed broadband services to end-users. In effect, they become quasi-infrastructure based competitors. The ULLS provides access seekers with a similar capability, although in addition they are able to utilise the voice-band frequency of the copper line. The ULLS (July 1999) was declared almost three years prior to the LSS (August 2002).

Currently, firms have at least four broad options available to them at the wholesale level in order to provide downstream broadband and/or voice services to end-users at the retail level.

¹² Multi-service Access Node.

Table 1 – Options for supplying retail broadband and/or voice services.

RETAIL SERVICES PROVIDED	VOICE	DATA	LINE RENTAL
Option 1	Telstra or another provider supplies voice calls to end-user. OR Access seeker obtains LCS and PSTN OTA services from Telstra to supply voice calls to end user.	Access seeker obtain LSS and supplies broadband to end-user.	Telstra or another provider supplies voice-capable line rental to end-user. OR Access seeker obtains WLR service from Telstra and re-sells line rental to the end-user.
Option 2	Access seeker obtains ULLS and supplies voice calls to end-user.	Access seeker obtains ULLS and supplies broadband to end-user.	Access seeker obtains ULLS and provides voice-capable line rental to end-user.
Option 3	Telstra or another provider supplies voice calls to end-user. OR Access seeker obtains LCS and PSTN OTA services from Telstra and re-sells voice calls to end user.	Access seeker obtains commercially priced xDSL wholesale service from Telstra (or another provider) and re-sells this to the end-user.	Telstra or another provider supplies voice-capable line rental to end-user. OR Access seeker obtains WLR service from Telstra and re-sells line rental to the end-user.
Option 4	Service provider installs end-to-end infrastructure to supply calls services to end-user.	Service provider installs end-to-end infrastructure to supply broadband services to end user.	Service provider installs end-to-end infrastructure to supply voice-capable line rental to end-user.

Access seekers may also choose to use the non-voiceband spectrum on a line via the LSS, combined with VoIP software and consumer hardware, to supply voice services to end-users. Such an approach could be used as a substitute to obtaining the full-spectrum ULLS line or resale products like WLR and LCS. Access seekers may also use inputs such as the ULLS to provide services at the wholesale level to other access seekers.

As at 17 September 2006, there were [c-i-c] LSS and [c-i-c] ULLS in operation.¹³ The LSS has been used predominantly by ISPs to provision high-speed broadband services (such as ADSL 2+) to end-users, while telecommunications providers have used the ULLS as an input into providing broadband and voice services to end-users. The

¹³ Telstra, *Submission in response to the ACCC's Draft Decision in relation to the re-declaration of the LSS*, September 2007, p. 3.

ACCC understands that the largest acquirers of the LSS are Chime Communications (iinet) with [c-i-c] services and Agile (internode) with [c-i-c] services.

Further detail on the take-up of LSS services and the extent of quasi-infrastructure competition is discussed in section 2.1 of this paper.

Pricing of LSS services

A number of developments have taken place since the LSS was declared in 2002. These developments have largely centred on, and have implications for, the terms and conditions upon which access seekers are able to purchase the LSS from Telstra. These developments are first summarised in the table below, and then discussed in more detail.

Table 2 – Chronological summary of developments

DATE	ISSUE
December 2004	Telstra lodges LSS undertaking
January 2005	Primus notifies the ACCC of an access dispute
November 2005	Chime Communications (iinet) notifies the ACCC of an access dispute
December 2005	ACCC rejects Telstra undertaking
January 2006	Telstra challenges the ACCC's undertaking decision at the Australian Competition Tribunal
April 2006	Request Broadband notifies the ACCC of an access dispute
June 2006	The Australian Competition Tribunal upholds the ACCC's decision to reject Telstra's undertaking
November 2006	Amcom notifies the ACCC of an access dispute
November 2006	Adam Internet notifies the ACCC of an access dispute
November 2006	Agile Communications notifies the ACCC of an access dispute
January-February 2007	The ACCC publishes interim determinations in three LSS access disputes noting a monthly price of \$3.20.
January 2007	Primus notifies the ACCC of an access dispute
January 2007	Telstra lodges High Court challenge
March 2007	Network Technology notifies the ACCC of an access dispute
March 2007	TPG Internet notifies the ACCC of an access dispute
July 2007	The ACCC issues a final determination in the Chime Communications (iinet) LSS access dispute
August 2007	The ACCC issues final determinations in the Request Broadband and Primus (Jan 05) LSS access disputes
August 2007	Telstra institutes judicial review proceedings under the <i>Administrative Decision (Judicial Review) Act 1977</i> in response to the final determinations issued in the Chime, Request and Primus access disputes

Telstra's LSS undertakings

In December 2004, Telstra lodged an undertaking with the ACCC on the terms and conditions under which it proposed to supply the ULLS and LSS services to access seekers. The LSS undertaking related to the 'connection and disconnection' charges and also 'monthly charges' proposed by Telstra. Telstra's proposed charges included 'LSS-specific costs' which were unitised across only LSS lines. Telstra's proposed monthly charge also included a network charge component.

In December 2005, the ACCC released its final decision on the 'monthly charges' proposed by Telstra for the ULLS and LSS. The ACCC rejected this undertaking for the following main reasons:

- the recovery of 'LSS-specific costs' over a broader range of services than proposed by Telstra was appropriate and consistent with the relevant statutory criteria;¹⁴
- even if it were found appropriate that 'LSS-specific costs' should continue, at least for the time being, to be recovered only from LSS lines, due to Telstra's revised demand estimates Telstra's proposed charges for this component were unreasonably high; and
- the recovery of line related costs in the LSS monthly charges was inconsistent with the relevant statutory criteria given current prices for other services provided by Telstra over the CAN.

In April 2006, the ACCC released its final decision on Telstra's proposed connection and disconnection charges for the LSS. The ACCC's decision was to reject this undertaking on the basis that:

- Telstra's proposed LSS connection price was not reasonable; and
- there were limited circumstances where a separate disconnection charge would be warranted.

In January 2006, Telstra appealed the decision to reject the 'LSS monthly charges' undertakings to the Australian Competition Tribunal. The Tribunal re-affirmed the decision to reject this undertaking. In also finding that Telstra's proposed granular approach to cost allocation was not reasonable, the Tribunal adopted the pooling approach as the comparator. In discussing the likely effect on competition of these two approaches to cost allocation, the Tribunal stated that:

... it is helpful in the present analysis to note that spreading the LSS-specific costs over a broader range of services would be more likely to promote competition between providers of those services, subject to those costs being pooled with other specific costs relevant to the provision of DSL services in downstream markets (eg Telstra's own internal costs of a nature

¹⁴ The ACCC had not at that stage come to a definitive view on the relevant broadened base (though it should be pooled at least over all DSL lines), as on any reasonable definition of such a base the LSS specific cost component of the LSS monthly charge would be significantly below Telstra's claimed amount.

similar to those of providing the LSS and ULLS-specific costs). This will ensure that all providers of DSL services using Telstra's CAN would face the same non-retailing costs of providing their services.¹⁵

The Tribunal went on to compare these two approaches to cost allocation against each of the other relevant criteria, and concluded that:¹⁶

On balance, we do not consider that allocating costs across only LSS lines is likely to give rise to a per unit cost estimate for providing the LSS (and a charge determined in reliance upon this cost estimate) that is reasonable. Allocation of costs on this basis is unlikely to:

be in the interests of access seekers that have a right to use the declared service;

promote competition between Telstra and other service providers that use access to the LSS to provide DSL services;

promote productive and dynamic efficiency; and

promote efficient investment in the infrastructure used to provide listed services.

The Tribunal further considered that Telstra's use of a four-year period for levelising the costs of providing the LSS was not reasonable having regard to the statutory reasonableness matters.¹⁷

LSS arbitrations

The ACCC is currently arbitrating six disputes in relation to the LSS and has recently concluded arbitrating three other LSS access disputes. On 19 January 2007, the ACCC issued reasons supporting interim determinations made in December 2006 for two LSS access disputes.¹⁸ Those interim determinations set a monthly charge of \$3.20 per LSS.

The ACCC issued its final determination in the Chime LSS access dispute on 12 July 2007. Chime disclosed the monthly charge of \$2.50, as determined by the ACCC, to the ASX. The ACCC publicly released its final determination and statement of reasons on 8 August 2007.¹⁹

The ACCC also issued final determinations in the Request Broadband and Primus LSS access disputes on 1 August 2007.²⁰

As noted above, the LSS service description specifies that the LSS is only provided in association with the provision of an underlying PSTN voice service on the same line. This requirement ensures that the underlying costs of the LSS line are fully recovered. The \$2.50 charge for the specific cost of providing the LSS is a payment from access

¹⁵ Re Telstra Corporation Ltd ACompT 4 [2006] at [150]).

¹⁶ *ibid.*, at [162]).

¹⁷ *ibid.*, at [119]).

¹⁸ The reasons are available at available at <http://www.accc.gov.au/content/index.phtml?itemId=712456>

¹⁹ ACCC, *Access dispute between Chime Communications and Telstra - LSS - publication of final determination and associated statement of reasons*, June 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁰ A list of determinations made is available on the ACCC's Determinations register at <http://www.accc.gov.au/content/index.phtml?itemId=768625>

seekers to Telstra for only the use of the high frequency part of the line. However, in all cases Telstra also recovers money from the underlying voice band PSTN service. If the underlying voice service is provided at the retail level by another carrier, Telstra will receive wholesale line rental costs and wholesale call costs such as payments for the local carriage service. The ACCC's current indicative price for monthly wholesale line rental charges is \$23.12 (excl. GST) for residential users. Alternatively, if Telstra is the retail provider of the underlying voice service, it will receive retail line rental charges and call costs. The line rental charge for Telstra's most popular residential plan, HomeLine Plus, is \$27.23 (excl. GST). Accordingly, Telstra receives significantly more revenue from a LSS line than simply the LSS charge.

On 8 and 29 August 2007, Telstra instituted judicial review proceedings under the *Administrative Decision (Judicial Review) Act 1977*, in response to the final determinations issued in the Chime, Request and Primus LSS access disputes.

Fixed Services Review

In December 2005, the ACCC initiated a Review of the Regulation of Fixed Network Services (Fixed Services Review).

In June 2006, the ACCC released a Position Paper on a range of issues relating to the future regulation of fixed network services. It focused on the future regulation of key wholesale services, in particular, whether to continue declaration of the ULLS and PSTN OTA and whether wholesale DSL and the Conditioned Local Loop Service (CLLS) should be declared. The position paper also outlined the ACCC's preliminary views on a forward-looking approach to *ex ante* regulation of fixed line services.

In April 2007, the ACCC released a Second Position Paper outlining a framework for the review of existing service declarations. This paper noted that the ACCC will:

- geographically delineate markets on a narrower basis than a 'national' scope;
- collect more systematic telecommunications infrastructure information to use in its analysis; and
- conduct a holistic review of service declarations due to the interdependency of certain service declarations.

Although the ACCC noted a holistic review of all existing fixed line service declarations (commencing in mid 2008) as its preferred approach for considering the appropriate mix of *ex-ante* regulation for fixed line services, the ACCC is required under the TPA to review the LSS declaration prior to its expiry in October 2007.

2. Long Term Interests of End-users (LTIE) test

The TPA requires the ACCC, after holding a public inquiry, to decide whether to:²¹

- extend or further extend the expiry date of the declaration;
- revoke the declaration;
- vary the declaration;
- allow the declaration to expire without making a new declaration; or
- allow the declaration to expire and then make a new declaration.

The ACCC's decision must be made on the basis of what would promote the LTIE. Section 152AB of the TPA provides that, in applying the LTIE test, the ACCC must consider the extent to which declaration is likely to result in the achievement of the following objectives.

- promoting competition in markets for listed services;
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.

In applying the LTIE test, the ACCC is required to consider the effects in each relevant market, as well as make an overall assessment of the benefits expected to flow to end-users from declaration. As a reference point it is useful to have regard to the benefits expected to flow to end-users both 'with and without' declaration.

2.1 Will declaration promote competition?

The ACCC's approach to determining whether declaration would promote competition in telecommunications markets

In certain telecommunications markets, specific market characteristics may mean it is more efficient for there to be only one provider of a given service. In these circumstances, however, it may be that there is scope for competition to occur in downstream and/or vertically related markets. Without access to the upstream service, however, carriers in vertically related markets will be unable to provide a final service to end-users.

Under the TPA, declaration of a service can promote competition in listed services by mandating access to those services that are supplied in monopoly-provided vertically

²¹ Section 152ALA(7)(a).

related markets. Further, under certain circumstances, the TPA enables the ACCC to set terms and conditions for access to these services. In turn, this can help ensure that a lack of competition in one market (the market in which the “eligible service” is supplied) does not prevent the development of competition in downstream, vertically related, markets.

In general, therefore, the ACCC believes that declaration of an eligible service is likely to promote competition where the following conditions are present:

- the eligible service is an input that is used, or that could be used, to supply carriage services or services provided by means of carriage services (often referred to as ‘downstream services’); and
- competition in the market for the supply of the eligible service is unlikely to be effective in the future and this is likely to have a detrimental impact on competition in markets for downstream services.

In most cases the markets most likely to be affected by declaration are the market(s) for downstream services rather than the market in which the eligible service is supplied (where these markets are separate). This reflects the key rationale for access to essential infrastructure – that of promoting more competitive downstream markets by enabling the supply of upstream inputs on terms and conditions more reflective of competitive outcomes. Further, the aim of promoting the LTIE guides the ACCC to be particularly mindful of the impact of declaration on the supply of services at the retail level.

That said, it is necessary in the first instance to assess the boundaries and state of competition of the market in which the eligible service is supplied. This is for three main reasons:

- the close interrelationship between upstream and downstream markets. The level of competition in the supply of the eligible service is a major determinant of the level of competition in downstream markets;
- finding that the state of competition in the market for the supply of the eligible service is strong would suggest that declaration is not necessary; and
- framing the scope of the market at the upstream level will have a direct bearing on the competition assessment, and therefore whether declaration is required.

Therefore, an assessment of whether declaration will promote competition requires consideration of both the market for the eligible service and its vertically related markets. For this inquiry, the relevant vertically related markets are downstream markets.

Once the boundaries of the relevant markets have been identified, the ACCC can then consider whether the state of competition in these markets will be enhanced by declaration of the eligible service. A useful tool for the ACCC to use when assessing whether declaration will promote each of the LTIE objectives is the future ‘with or without test’. Under this approach, the current state of competition in the markets for

both the eligible and downstream services is first assessed. Only by understanding the current state of competition in these markets can a meaningful vision of the likely future state of competition be understood. If the current state of competition is found to be less than effectively competitive, there is a prospect that declaration could promote competition in the future. Bearing in mind the market dynamics, the future state of competition with or without declaration can then be assessed.

In assessing whether declaration of line sharing is likely to promote competition for the purposes of this current inquiry, the ACCC will undertake a two-stage analysis:

- first, identify those markets relevant to determining whether declaration will promote competition; and
- second, assess the current state of competition in these markets and assess whether the LSS declaration is still required to promote competition in the relevant markets (including the relevant downstream markets).

What are the relevant market(s)?

In considering whether declaration of the LSS is required to promote competition, the ACCC commences its analysis by identifying the relevant market(s) likely to be affected by declaration of the eligible service. The relevant statutory provisions indicate that the ACCC may consider both:

- the market in which the eligible service is or would be supplied; and
- other markets (such as downstream markets) in which competition may be promoted.

Relevant dimensions of markets

The ACCC typically considers four dimensions of relevant markets (the explanations below are framed for the context of a declaration inquiry):

- the relevant *product* categorisation – involves identifying the possibilities available to end-users (or access seekers) to substitute to alternative products or suppliers that are of sufficient strength to constrain the pricing, output and other relevant considerations of an access provider.
- the relevant *geographic* region(s) – involves identifying the possibilities available to end-users or access seekers to source substitute products or seek supply from suppliers in other locations that are of sufficient strength to constrain the pricing, output and other relevant commercial decisions of an access provider.
- the relevant *functional* level in the vertical production chain – involves identifying (where relevant) the separate fields of rivalry within the production chain.
- the relevant *time frame* (temporal elements) – involves determining the time frame over which substitution possibilities relevant for assessing the case for/against declaration may occur.

A key element of framing the relevant markets (in particular, with respect to the product and geographic dimensions of markets) is considering the relevant *competitive constraints* on commercial decisions. A key economic principle that determines the effectiveness of a competitive constraint is substitutability. Put simply, substitutability considers the feasible and realistic alternatives available to parties (i.e. reactions of market participants) in the event that a service was not available, was subject to a price increase or there were measures to degrade the quality of services or affect supply adversely in other ways.

The ACCC considers both demand and supply-side substitutability constraints. From the *demand-side* a relevant consideration is to what extent end-users or access seekers can substitute towards other products/services (or sources of supply) in the event of a significant price rise, or equivalent exercise of market power, by an incumbent firm. From the *supply-side* a relevant consideration is the extent to which (and how quickly) rival firms could switch or expand supply in the event of a significant price rise, or equivalent exercise of market power, by an incumbent firm.²²

The ACCC is also guided by the ‘commercial realities’ of a particular industry (such as actual patterns of supply) to ensure that market(s) which it identifies accurately reflect the arena of competition.²³ The ACCC will also take into account that declaration and the overall telecommunications regulatory regime itself might affect the dimensions of particular markets.

It is worth noting that Part XIC of the TPA does not require the ACCC to precisely define the scope of relevant markets for the purpose of a declaration inquiry. In certain circumstances, it may be sufficient to broadly identify the scope of the relevant markets likely to be affected by declaration for the purpose of analysing competition. Furthermore, over time, declaration itself might affect the dimensions of these markets. Accordingly, market analysis under Part XIC should be seen in the context of shedding light on how declaration would promote competition rather than in the context of developing ‘all purpose’ market definitions.

The market in which the eligible service is supplied and other upstream markets

The process of market definition for the eligible service (LSS) begins with the service in question. In the context of this inquiry, the key issue is what wholesale services access seekers could turn to (in terms of price and the level of functionality/quality) in order to compete in the relevant downstream markets if the provider of the eligible service were to ‘give less and charge more’.

²² The hypothetical monopolist or ‘SSNIP’ test is often cited as useful tool to assist a market definition analysis and consideration of demand and supply-side substitutes; although it is rarely used in a practical sense. Essentially, the conceptual experiment involves establishing the smallest ‘product’ or ‘geographic’ space over which a hypothetical monopolist would impose a ‘small but significant increase in price’ without reducing its profits. If consumers would switch, or suppliers would expand, supply to other products or geographic areas to such a degree that the price rise was unprofitable; the market definition should be expanded to include these substitute product/areas.

²³ The relevant case law emphasises that the ACCC should be cognisant of ‘commercial realities’ when defining, inter alia, the geographic dimension of a market. In *Re Australia Meat Holdings*, (1989) ATPR 40-932 at 50,011 and 50,092 it is stated that ‘Any geographic market ... must be one that corresponds to the commercial realities of the industry and represents an economically significant trade area. Because a geographic market determination looks to actual trade patterns, it is not required that geographical boundaries be drawn with exactitude...’

The ACCC understands that Telstra remains the sole supplier of a LSS to access seekers. However, a firm that wishes to supply downstream broadband services to end-users potentially has a range of alternative options at the wholesale level in order to provide services at the downstream level (see Table 1 above).

In 2002, the ACCC concluded that of the potential alternatives at the wholesale level, only Hybrid Fibre Co-axial (HFC) networks were considered to be able to provide a potential constraint on the pricing of an LSS. Specifically, the ACCC formed the view that:

- the ULLS provided a level of functionality over and above that of the LSS and therefore can not be considered as a direct substitute and further, ULLS was only attractive to access seekers if the access seeker provided both voice and data services;²⁴
- it was not convinced that current wholesale ADSL products will serve to constrain the pricing of Telstra's LSS and therefore these two services are not in the same market;²⁵
- while HFC and LSS can be considered as part of the same geographic market in some areas, the extent of substitutability is limited to a select number of geographic areas;²⁶
- it would be inappropriate to include wireless services in any analysis of the state of competition at this time.²⁷

Submissions

The submissions to the Discussion Paper present a range of views on the substitutability of the LSS with other modes of access and wholesale products.

Telstra states that the market in which the LSS is supplied is 'substantially broader' than the ACCC has previously concluded and is likely to include ULLS, upper spectrum sharing (USS)²⁸ and wholesale ADSL in a functional and geographic sense.²⁹

²⁴ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 41.

²⁵ *ibid.*, p. 43.

²⁶ *ibid.*, p. 44.

²⁷ *ibid.*, p. 45.

²⁸ The USS is essentially line sharing between non-Telstra entities. Telstra states that USS would involve a jumper being run on Telstra's main distribution frame (MDF) to connect a local loop to the USS access seeker's DSLAM where the signal is split into voiceband and non-voiceband components. The USS access seeker would retain the non-voice band component and use it to provide broadband services, while the voiceband component would be passed back to the ULLS access seeker

²⁹ Telstra, *Submission in response to the ACCC's Discussion Paper in relation to the LSS re-declaration of the LSS*, May 2007, p. 13

In support of its contention, Telstra argues:

- an LSS carrier moving to ULLS would not only retain *all* service capabilities (including functionality, quality and geographic coverage), but would in fact widen its directly supplied product offerings;³⁰
- adopting USS would be technically feasible and there are three other providers (Optus, Primus and AAPT) who own or have access to the infrastructure required to provide the USS;³¹ and
- wholesale DSL offerings provide a high speed alternative to LSS and provide some constraint on Telstra's ability to price the LSS in a supra- competitive manner.³²

In contrast, Optus states that there are no adequate substitutes to the LSS:

There are no adequate substitutes for the LSS, due to the limitations of alternative forms of infrastructure and various factors that impede an LSS access seekers' substitution to provision services via the ULLS.³³

In this regard, Optus asserts that an access seeker will face numerous barriers in migrating to the ULLS, namely:

- a substantially higher price;³⁴
- substantial costs in installing additional infrastructure (voice switch, different types of DSLAMS);³⁵ and
- barriers to competition in the local call market (including high sunk costs and the existence of Telstra's legacy position as the incumbent).³⁶

Optus states that, as a result of these factors, it is unlikely that access seekers would substitute the ULLS for the LSS.³⁷

Optus also believes that wholesale DSL, HFC and wireless are not in the same upstream market as the LSS.

Optus argues that wholesale DSL could potentially constrain the commercial pricing of the LSS, however, it states that the constraint would depend upon the level of competition. Optus submits that competition in wholesale DSL is currently low (only suppliers are Telstra, Optus, PowerTel and Nexstep) and that Telstra has substantially greater subscribers and revenue, which makes Telstra's DSL product the primary substitute.

³⁰ *ibid*, p. 14

³¹ *Ibid*, p. 16

³² *ibid*, p. 17

³³ Optus, *Submission to ACCC on Review of the Line Sharing Service*, May 2007, p. 5

³⁴ *Ibid*, p. 6

³⁵ *ibid*, p. 6

³⁶ *ibid*, p. 6

³⁷ *ibid*, p. 7

Optus states that although HFC networks can be used to deliver high speed internet access, the limited coverage of the network, technical limitations and costs of rolling out further coverage means that it cannot competitively constrain Telstra's pricing of the LSS in the short to medium term.

Optus believes that wireless is not a suitable substitute to the LSS because the geographical reach of wireless networks is limited. It also asserts that spectrum availability is a barrier to entry, given that Unwired owns the majority of the core WiMAX spectrum in major cities. Optus states that wireless download speeds do not compare with those of fixed line broadband services.

AAPT states that the relevant market at the upstream level is the 'wholesale market for the provision of broadband connectivity from a customer's premises to an aggregation point'. However it notes that the various types of broadband connectivity are not direct substitutes given the different level of investment required.

AAPT asserts that there have been no developments in the market since the ACCC's assessment in 2002 to warrant reaching a different view regarding the level of substitutability between the ULLS and LSS.³⁸ AAPT argues that there are a number of issues involved with migrating from LSS to ULLS. These include:

- whether the end-user is supplied with a voice service from Telstra and wished to retain this service;
- availability of additional copper lines to the end-user, in the case where the end-user retains Telstra's telephony services and there is no spare copper pairs available to that end user ;
- the lack of migration path at present to migrate from LSS to ULLS; and
- additional costs involved in using ULLS rather than LSS.

The CCC asserts that the LSS is not a substitute for the ULLS, but a stepping stone toward it.³⁹

ACCC's views

Product dimension

An analysis of the product dimension begins with the LSS itself, and then asks which other services, if any, place a constraint on the pricing and output behaviour of the provider(s) of this service. The ACCC notes that Telstra remains the only supplier of the declared LSS service.

A central issue to this analysis is the functionality provided by the LSS compared with potential substitute services. In the case of a vertically related service, such as a LSS, the basic functionality of the service is heavily dependent on the downstream services

³⁸ AAPT/PowerTel, *Joint Submission to the ACCC in response to the LSS Discussion Paper*, May 2007, p. 3

³⁹ CCC, *CCC submission to the Draft Decision on Declaration of the Line Sharing Service*, September 2007, p. 3

to which it is an input. As outlined above, the LSS allows access seekers use of the higher frequency part of the copper line, in combination with their own DSLAM infrastructure, to provide end-users with high speed broadband services. Access seekers have scope to provide a variety of through-put speeds based on the type of DSLAM infrastructure deployed and the distance of the customer from the local exchange. Currently, access seekers using the LSS can provide ADSL2+ services to end-users with theoretical maximum speeds of up to 24 Mbps up to 1.5km from the exchange, falling to around 9 Mbps at 3 km from the exchange. LSS access seekers can also deploy VoIP software and consumer hardware to supply voice services to end-users.

Thus, the assessment of the boundaries of the relevant upstream market involves evaluating the alternative media that can be used by access seekers to provide broadband and voice services to end-users. There is likely to be a continuum of potential functional substitutes based on factors such as the technical characteristics of service platforms (e.g. available through-put speeds).

Submissions to the Discussion Paper discussed a number of potential alternatives at the wholesale/access service level.

Telstra's submission asserts that there are three services that may be considered functional substitutes for the LSS; the upper spectrum sharing (USS) service, ULLS and wholesale xDSL.

The USS is essentially a LSS provided by an access seeker using a ULLS to another access seeker. Telstra's submission explains:

USS would involve a jumper being run on Telstra's main distribution frame (MDF) to connect a local loop to the USS access seeker's DSLAM where the signal is split into voiceband and non-voiceband components. The USS access seeker would retain the non-voice band component and use it to provide broadband services, while the voiceband component would be passed back to the ULLS access seeker.⁴⁰

While the USS would appear to provide the same functionality as the LSS, there are a number of factors that need to be considered in assessing its ability to act as a viable substitute to the LSS. The ACCC understands that no parties have used the USS since declaration of the ULLS and there are no current industry plans to commence supply of the service. Telstra states that it would need to make certain modifications to its own processes and systems to facilitate access seekers entering into USS supply agreements, however it has received no requests to date. These modifications may be likely to take significant time to implement, as Telstra's systems have not been shown to be easily modified to support non-standard services such as LSS to ULLS transfers.

More generally, the availability of USS will be dependent on take-up of the ULLS by access seekers. ULLS deployment is limited to approximately [c-i-c] services at September 2007. This may affect the commercial viability of the USS given the limited addressable market available to access seekers. For example, access seekers may not be able to realise the necessary economies of scale at the exchange level to compete in the relevant downstream markets via use of the USS. The bundling

⁴⁰ Telstra submission to the Discussion Paper, op cit, p. 15

strategies of ULLS-based competitors in the downstream retail markets may also pose a barrier to entry. These factors, in combination, suggest that while USS is technically feasible it is unlikely to provide a viable substitute to the LSS at this current time due to its limited commercial feasibility.

The ULLS could also appear to serve the functional needs of access seekers that seek access to the LSS, as both the ULLS and the LSS can be used for the provision of xDSL services and voice services in downstream markets. The ACCC found in its declaration inquiry in 2002 that the ULLS provides a level of functionality over and above that of a LSS, and therefore can not be considered as a direct substitute in a functional sense:

...the degree of substitutability between two goods is ultimately indicated by whether the price of one good places a constraint on that of the other. On the demand side, it is a matter of the degree to which a rise in the price of one good leads to an increase in demand for another. Under this scenario, the question would be whether substitution between the two products would take place in response to a small percentage change in the price of a LSS...

...Line sharing, by contrast, enables carriers to provide ADSL services without the need to provide a range of services such as voice so as to remain viable. The Commission believes, therefore, that from a functional perspective the ULLS does not represent a viable option for those access seekers interested solely in providing high-speed data services; even if it is priced at efficient levels. This would mean that a considerable change in relative prices would be needed for substitutions to take place. Therefore, the Commission is inclined to consider the ULLS to lie in a separate wholesale market from a LSS.⁴¹

The ACCC considers that these factors are still relevant in considering the level of substitutability between ULLS and LSS. In the case where an access seeker only wishes to provide broadband services in downstream markets, the ULLS can only be considered a weak substitute to the LSS. However, in the case where an access seeker is using the LSS for the provision of both broadband and voice services, the ULLS may constitute a more direct substitute. In this regard, a number of submissions have commented on the potential barriers to access seekers substituting the ULLS for the LSS, including lack of managed migration provisions for LSS to ULLS transition. These issues are discussed in further detail below.

The ACCC recognises that communications markets are rapidly evolving and there are a number of potential developments that may increase the degree of substitutability between the LSS and the ULLS into the future. For example, increased consumer preferences for bundled retail fixed voice and broadband services; VoIP services becoming a viable substitute for PSTN voice services; and increased demand for 'naked DSL' service (i.e. broadband services without an underlying PSTN voice service). At this stage, demand for a 'naked DSL' product is very limited. While Telstra notes in its submissions that a number of industry parties have announced intentions to provide naked DSL offerings, the level of take-up and the commercial viability of these products is not yet substantiated.⁴² Therefore, the use of the ULLS without the voice component is unlikely to be an effective substitute for the LSS. Similarly, VoIP services can not be considered an effective substitute for PSTN voice due to current limitations concerning the universality, security and quality

⁴¹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, pp. 40-41

⁴² Telstra submission to the Draft Decision, op cit, p. 3

characteristics of VoIP services. In terms of consumer preferences for bundled broadband and voice offering, the ACCC notes that [c-i-c] per cent of LSS end-users still acquire the PSTN voice component from Telstra, which indicates that bundling preferences may not be sufficiently strong at this time to consider ULLS and LSS as direct substitutes. In practice, innovation and consumer choice in the supply of high speed broadband services has been driven by access seekers, such as internet service providers, using the LSS to deliver ADSL 2+ services to end-users.

While wholesale ADSL services and the LSS have some degree of substitutability in the supply of upstream broadband carriage services, wholesale ADSL involves minimal infrastructure deployment by the access seeker. As a resale service, wholesale ADSL also provides limited scope for product differentiation at the retail level. In contrast, the LSS provides access to the basic underlying infrastructure upon which access seekers can compete across various dimensions of the price-product-service package; for example, by offering end-users ADSL at different through-put speeds and VoIP services. Therefore, the provision of broadband services via the LSS enables greater functionality for end-users. The ACCC understands that Telstra has commenced wholesaling ADSL products with theoretical maximum through-put speeds of 8Mbps in certain areas and a number of other providers (iinet, PowerTel, Optus, Nexstep and Agile) are wholesaling ADSL2+ services.

In addition to the copper fixed line network, there are a number of HFC cable networks in metropolitan and regional areas of Australia that are capable of delivering high speed broadband and voice services. In total, Telstra and Optus' HFC networks have a geographic footprint of approximately 2.7 million homes. Telstra uses its HFC network for the provision of television and broadband services. Optus uses its HFC network for the provision of television and broadband services, as well as voice services. There is a large degree of overlap between the two networks — Telstra's HFC network services 2.5 million homes and Optus' services 1.4 million homes. In September 2007, Telstra announced it had upgraded its HFC network to provide through-put speeds of up to 30 Mbit/s to 1.7 million homes, with the remaining 0.8 million homes accessing speeds of up to 17 Mbit/s.⁴³ Optus' HFC network is reported to offer through-put speeds of up to 9.9 Mbps.⁴⁴ The ACCC understands that Optus could also provide broadband services with considerably higher through-put speeds (up to 40Mbps) within its existing footprint if it chose to make incremental upgrades to head-end equipment and modems. Such an upgrade would appear to involve a relatively modest investment.⁴⁵ TransACT, Neighborhood Cable and Austar have also deployed HFC networks with relatively limited geographic footprints in regional areas of Australia.

There are a number of fixed and mobile wireless networks that can also provide broadband and voice services.

While fixed wireless networks have been predominantly targeted at end-users in regional and remote areas, Personal Broadband Australia (PBA) and Unwired have

⁴³ Telstra Media Release, *BigPond launches 30 Mbps Cable for Sydney and Melbourne*, 12 September 2007.

See: http://www.telstra.com.au/abouttelstra/media/announcements_article.cfm?ObjectID=40497

⁴⁴ Deutsche Bank, *Company Bulletin – Telstra Corporation*, 7 August 2006, p. 4.

⁴⁵ The ACCC understands that Optus has recently invested in upgrading its HFC network to provide digital Pay TV services, including the deployment of digital Set top units.

recently deployed networks in metropolitan areas of Australia. PBA's iBurst network covers Sydney, Melbourne, Brisbane, Adelaide, Perth, Gold Coast and Canberra is intended to provide coverage to 75 per cent of the Australian population, once completed. Unwired has also deployed networks in Sydney and more recently in the inner metropolitan areas of Melbourne. In terms of functionality, the ACCC notes that these networks currently provide maximum through-put speeds of 1 Mbps, therefore are likely to provide a limited substitute to the LSS.

In terms of mobile wireless networks, Telstra claims that the 'Next G' 850Mhz network covers 98.8 per cent of the population and offers average download speeds of between 550 kbps to 3.0 Mbps, with a theoretical maximum throughput speed of up to 6.0 Mbps.⁴⁶ Hutchison, Vodafone and Optus have also partially completed 3G network upgrades. Similarly, these networks are reported to offer average download speeds of between 550 kbps to 1.5 Mbps and theoretical maximum speeds of up to 3.6 Mbps.⁴⁷ In considering the extent to which these services provide a functional substitute to the LSS, the ACCC notes that theoretical maximum download speeds of up to 14.4 Mbps are expected to be achieved in 2008. This issue is discussed further in relation to the temporal dimension of the relevant upstream market.

Geographic dimension

In considering the geographic dimension of the upstream markets for the eligible service, the ACCC notes that the LSS will be available in all geographic areas where Telstra's fixed line customer access network (CAN) is deployed.⁴⁸ Telstra's copper CAN extends nationwide, therefore the LSS can be provided in most geographic markets in Australia. The ULLS has an equivalent geographic footprint while Telstra claims its mobile wireless network covers 98.8 per cent of the population. As noted above, fixed wireless networks are progressively being deployed in the mainland capital cities of Australia as well as in specific rural and regional areas.

HFC networks are limited to the mainland capital cities and some small regional areas. Telstra's network passes 2.5 million homes in Adelaide, Brisbane, the Gold Coast, Melbourne, Perth and Sydney. Optus' network is capable of servicing 1.4 million homes in Brisbane, Melbourne and Sydney. While the HFC networks may represent an alternative to a LSS from a functional perspective, the two can only be considered as part of the same geographic market in these overlap areas. Thus, the extent of substitutability between a LSS and HFC networks is limited to only a select number of geographic markets. The ACCC is not aware of plans for any of the existing HFC networks to be extended. While Optus' HFC network within the current geographic footprint could provide broadband services with through-put speeds in excess of those available via use of the LSS, Optus has, to date, chosen not to provide these services across its network.

The ACCC has in the past adopted a 'national' geographic dimension when framing the geographic scope of the relevant market(s). However, as noted in its Fixed Services Review, in the future the ACCC intends to examine competitive dynamics at

⁴⁶ Telstra Media release, *Telstra turbocharges the laptop, boosting mobile broadband in Australia to as fast as anything on Earth*, 25 September 2007.

See: http://www.telstra.com.au/abouttelstra/media/announcements_article.cfm?ObjectID=40619

⁴⁷ Communications Day, *Vodafone to constrain HSDPA to metro areas*, Issue 3069, 3 July 2007.

⁴⁸ The only impediment to the provision of LSS may be the presence of pair gain technology.

a more geographically disaggregated level with the aid of empirical data. Notwithstanding the current absence of granular information, the ACCC is not aware of significant alternative fixed line networks, aside from Optus' HFC network, that could provide similar functionality to ADSL for the provision of high-speed broadband services.

Functional dimension

Delineation of the relevant functional market requires identification of the vertical stages of production and/or distribution which comprise the relevant arena of competition. The LSS involves an access provider selling access to an access seeker, and not directly to an end-user. Thus, the service is considered to operate at the upstream/infrastructure stage of production.

Temporal dimension

The temporal dimension of the market refers to the timeframe over which substitute services could potentially exert a competitive constraint on the pricing and output behaviour of a provider of the eligible service.

From a temporal perspective, the ACCC notes that there are a number of 3G network upgrades being undertaken in relation to mobile broadband wireless services. In this regard, it is possible that mobile wireless broadband services may increasingly offer an alternative to a LSS for access seekers over time. However, the ACCC considers that these networks are in early stages of deployment, and service offerings, at both the retail and wholesale level, are not yet fully developed. Currently, mobile wireless broadband service providers claim to offer maximum through-put speeds of up to 6 Mbps. These available through-put speeds are considerably lower than those available via ADSL2+ technology. Retail broadband wireless services are also generally offered at a higher retail price point (on a Mbps-basis) compared with ADSL retail services.⁴⁹ Therefore, it is uncertain to what extent services on these wireless networks offer viable alternatives, in terms of quality, functionality and price, to those retail broadband services provided via Telstra's copper CAN. Given these factors, it is unclear as to whether and to what extent and over what time-frame mobile wireless services will provide a competitive constraint on the pricing and output behaviour by suppliers of the LSS.

Thus, it is unclear as to whether and to what extent and over what time-frame mobile wireless services will provide a competitive constraint on the pricing and output behaviour by suppliers of the LSS. More generally, the competitive constraint provided by wireless broadband services will also depend on emerging demand characteristics (consumer preferences in relation to available through-put speeds and/or mobility), which are still not yet fully clear.

The ACCC recognises that as communications markets evolve, there will be an on-going need for robust empirical information as an input into the ACCC's assessment of competition. To this end, the ACCC, in March 2007, initiated a process under which it will collect (and regularly update) information regarding the nature and

⁴⁹ Wireless services may meet other consumer preferences, such as mobility, which may command a price premium.

location of competing infrastructure in geographic areas of Australia.⁵⁰ This information is intended to assist the ACCC in future considerations of Part XIC matters, including its proposed holistic review of fixed line services declarations.

Relevant downstream markets

An important focus for this inquiry is whether the LSS declaration is required to promote competition in the relevant downstream markets.

The ACCC is required to identify only those markets in which declaration of the eligible service is likely to have a material effect. Where there are several markets that could be affected by declaration, it may be sufficient for the ACCC to focus its attention only on the main or major markets in which declaration may promote competition.

In 2002, the ACCC identified the following downstream markets as being the most relevant to the LSS declaration inquiry:

- *the high bandwidth carriage service market* – a national market for the supply of high bandwidth carriage services by service providers to end-users; and
- *the local telephony market* – a national market for the supply of local telephony services (including fixed line calls and line rental) by service providers to end-users.

The ACCC noted in its Discussion Paper that there may be a possibility that the relevant downstream markets (including the relevant product and geographical dimensions) may have changed since 2002.

Submissions

The submissions indicate that the most relevant downstream market in this inquiry is the high bandwidth carriage services market because LSS enables CSPs to access the high bandwidth spectrum to serve end-users with DSL based services.

Telstra also argues that the downstream market is likely to be part of the broader cluster market including voice services because broadband service suppliers are also able to provide voice services to their customers.⁵¹

Optus also contends that the downstream market can include the local telephony market, however it argues that the market is currently highly concentrated and uncompetitive.⁵² Optus does, however, suggest that continued declaration of the LSS is likely to stimulate competition through the use of VoIP services.

AAPT does not believe that VoIP is an effective substitute to PSTN voice.⁵³

⁵⁰ ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

⁵¹ Telstra submission to the Discussion Paper, op cit, p. 21.

⁵² Optus submission to the Discussion Paper, op cit, p. 13.

⁵³ AAPT/PowerTel submission to the Discussion Paper, op cit, p. 4.

ACCC's views

The ACCC considers that the following downstream markets are the most relevant to this LSS declaration inquiry:

- *the high bandwidth carriage service market* – a national market for the supply of high bandwidth carriage services by service providers to end-users; and
- *fixed voice services markets* – the national markets for the supply of local telephony services (including fixed line calls and line rental), domestic long-distance, fixed-to-mobile, and international services by service providers to end-users.

The ACCC believes that the key downstream market in this inquiry is the market for the supply of high bandwidth carriage services to end-users. As outlined above, the LSS is used primarily as an input into broadband communications to end-users, particularly ADSL. Broadband services can be generally characterised as an ‘always on’ connection that involves the carriage of communications at through-put speeds higher than equal to or greater than 256 Kbps.⁵⁴

The through-put speed available to end-users will be a key aspect of the broadband service as this will dictate the type of applications that can be used.

Consumers interested in broadband services are likely to consider a range of technical options for its delivery. High-speed broadband services, comprising various through-put speeds, can be provided by means of ADSL (ULLS and LSS-based) and HFC cable, as well as other types of infrastructure. Broadband services with similar pricing, quality and functionality delivered via these different networks will be substitutable from the perspective of most consumers. However, the ACCC notes that demand characteristics in the market for broadband services are still emerging.

The downstream markets for fixed voice services are also relevant to this declaration inquiry for a two main reasons. First, the LSS can be used as an input in the provision of voice services to consumers via VoIP technology. However, the ACCC notes that there is some debate as to whether current VoIP offerings provide a direct substitute for PSTN voice services, from the perspective of end-users. Second, the LSS will be relevant to the downstream fixed voice services markets to the extent that that many end-users now purchase voice services as part of a broader bundle of voice and broadband services. An access seeker could use the LSS in conjunction with WLR, LCS and PSTN OTA to compete in this retail space. Thus, declaration of LSS may encourage competition in downstream markets for fixed voice services.

In its previous regulatory assessments under Part XIC of the TPA, the ACCC has generally adopted a ‘national’ geographic dimension when framing the geographic scope of the relevant market(s). The ACCC noted in its *Fixed Services Review - a second position paper* that the uneven roll-out of competing infrastructure, and the uneven development of full-facilities and quasi-infrastructure competition in parts of Australia, raises the possibility that the competitive dynamics differ in discrete

⁵⁴ This is the definition used by the Australian Bureau of Statistics (ABS).

geographic regions. This may have implications for the geographic dimension of the relevant market when assessing whether a declaration will be in the LTIE.

In order to assess the geographic market dimension in future decisions under Part XIC, the ACCC considered that there was a need to obtain more empirical data on competitive infrastructure deployment in geographic areas of Australia. To this end, the ACCC, in March 2007, initiated a process under which it will collect (and regularly update) information regarding the nature and location of competing infrastructure.⁵⁵ This information is intended to assist the ACCC in future considerations of Part XIC matters, including its ability to geographically delineate markets where this is warranted by robust empirical evidence. This information will be available to inform the ACCC's analysis as part of its proposed holistic review of fixed line services declarations due to commence in mid 2008.

Notwithstanding that this information gathering is being developed and that the degree of competition may vary between regions, the ACCC intends to adopt a national market for the relevant downstream high bandwidth carriage service market and fixed voice telephony markets for its present assessment. As noted above, Part XIC of the TPA does not require the ACCC to precisely define the scope of relevant markets for the purpose of a declaration inquiry. The ACCC notes that most retail broadband and fixed voice service offerings are priced similarly irrespective of geographic location. Further, as the following analysis suggests, even in those areas where infrastructure investment is most prevalent, the degree of competition in retail broadband services (absent the LSS) is likely to be limited. In addition, the ACCC's analysis on the relevant upstream market recognises that there are various alternatives for the LSS (at the wholesale/access service level and at differing stages of maturity) available in different geographic areas. This will be a relevant factor when considering the level of competition in related downstream markets in specific geographic areas.

ACCC's approach to assessing the state of competition in the relevant markets

Once the relevant markets have been defined, the next step in the analysis is to assess the state of competition in the relevant markets. Importantly, assessing the state of competition is not a static analysis limited to a description of current conditions and behaviour. Rather, it should also take into account dynamic factors such as the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion by existing suppliers) constrains pricing and output decisions.

If competition in the relevant markets is determined to be effective, then declaration of the eligible service is not likely to have an effect in terms of promoting further competition or the LTIE. In this regard the Explanatory Memorandum states:

... it is not intended that the access regime embodied in this Part impose regulated access where existing market conditions already provide for the competitive supply of services. In

⁵⁵ ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

considering whether a thing will promote competition, consideration will need to be given to the existing levels of competition in the markets to which the thing relates.⁵⁶

This section outlines the concept of ‘effective competition’ and sets out the factors to which the ACCC will have regard to in determining whether there is effective competition in the relevant markets.

The concept of ‘effective competition’

At the theoretical level, the concept of ‘perfect competition’ describes a market structure in which no producer or consumer has the market power to influence prices. Economic theory suggests that perfectly competitive markets have a large number of buyers and sellers, goods/services are perfect substitutes, all firms and consumers have complete knowledge about the pricing/output decisions of others and all firms can freely enter or exit the relevant market.

In reality, these conditions are rarely found in any market or industry – even those in which competition between rival firms is relatively intense. It is certainly not a realistic threshold for fixed-line telecommunications markets, given that:

- many services are provided by a small number of providers, in a situation where the incumbent as owner of the only ubiquitous local loop remains the predominant provider of most (if not all) essential inputs;
- the industry is characterised by economies of scale, scope and density over large ranges of output;
- services are often differentiated from each other; and
- there is constantly evolving service types and network technologies.

The concept of ‘effective competition’ recognises the practical limitations of the theory of perfect competition. The ACCC therefore accepts that a standard of effective competition is the appropriate one. Definitions of such a standard are always difficult, but some characteristics can be highlighted.⁵⁷ Effective competition:

- is more than the mere threat of competition—it requires competitors active in the market, holding a reasonably sustainable market position;⁵⁸
- requires that, over the long run, prices are determined by underlying costs rather than the existence of market power (a party may hold a degree of market power from time to time);
- requires that barriers to entry are sufficiently low and that the use of market power will be competed away in the long run, so that any degree of market power is only transitory;
- requires that there be ‘independent rivalry in all dimensions of the price/product/service [package]’;⁵⁹ and

⁵⁶ Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996 – item 6, proposed s. 152AB.

⁵⁷ This is not intended to be an exhaustive characterisation of effective competition.

⁵⁸ Olivier Boylaud and Giuseppe Nicoletti, ‘Regulation, market structure and performance in telecommunications’, *OECD Economics Studies*, no. 32, 2001/1.

- does not preclude one party holding a degree of market power from time to time, but that power should ‘pose no significant risk to present and future competition’.⁶⁰

These five factors are indicators of the extent to which competition constrains market participants to supply products and services of a given quality at prices that are based on efficient costs.

The OECD refers to effective competition in telecommunications in the following way:

Effective competition is concerned not only with the ability to control prices and costs for products and/or services, but also with consumer benefits such as quality of service, a range of services available to consumers, efficient operation of firms in a market and innovative service provisions as well.⁶¹

The ACCC considers that, where duplication is not inefficient, facilities based competition is more likely to be ‘effective’ (and therefore promote the LTIE) because rivals are able to differentiate their services and compete more vigorously across greater elements of the network (and supply) chain. It is also more likely to produce enduring benefits because competitors that have invested in their own infrastructure are more likely to remain in the market (because of high sunk costs).

Factors which are relevant to a competition assessment

When assessing the effectiveness of competition in a particular market, the ACCC will examine a range of both structural and behavioural characteristics. This includes (but is not limited to) factors such as:

- structural factors, including the level of concentration in the market;
- the potential for the development of competition in the market (including planned entry, the size of the addressable market and the existence and height of barriers to entry, expansion or exit in the relevant markets);
- the dynamic characteristics of markets, including growth, innovation and product differentiation, as well as changes in costs and prices over time; and
- the nature and extent of vertical integration in the market.

Competition is a process of rivalry. Accordingly it may be difficult to describe (in qualitative terms) the *extent* to which declaration is required to promote competition through simply examining its impact on that process. In many cases, it will be more instructive to examine the extent to which declaration is required to promote competition from the perspective of end-users (i.e. to have regard to the likely results from increased competition in terms of price, quality and service diversity), and the

⁵⁹ Re Queensland Co-operative Milling Association Ltd and Defiance Holding Ltd (1976) 25 FLR 169.

⁶⁰ *ibid*, p. 42. In general, however, market power must not be used in a way that would constitute a ‘misuse of market power’.

⁶¹ OECD, *Indicators for the Assessment of Telecommunications Competition* DSTI/ICCP/TISP, 2001, p. 6.

likely prospects for competition in the absence of declaration. Where declaration facilitates the development of new services and the provision of better quality services, it is likely to be required to promote competition.

The level of competition in the relevant markets

The following section provides an analysis of the state of competition in the relevant markets.

Market in which the eligible service is supplied

Submissions

Telstra states that it is constrained in the wholesale market for broadband services because of the availability of a wide range of substitutes and the absence of material barriers to entry, expansion and switching to LSS substitutes. Telstra identifies the ULLS, USS, HFC, and wireless services as substitutable to the LSS.

Telstra submits that:

“the presence of the ULLS alone is sufficient to ensure the wholesale market for broadband services remains workably competitive if LSS were not re-declared. Indeed, the case for non re-declaration is only strengthened by the observed availability and take-up of WDSL and the potential emergence of USS services and the presence of alternative networks (cable and wireless).”⁶²

Telstra also provided information on existing wholesale arrangements available in the market for broadband services.⁶³

Telstra asserts that the market in which the LSS is supplied is workably competitive because:⁶⁴

- ULLS and USS are close substitutes for LSS in the provision of high speed data services at the wholesale and retail layers in all areas that LSS is available. The presence of close substitutes is sufficient to provide a competitive constraint on Telstra’s behaviour in the absence of a declared LSS;
- barriers to ULLS and USS entry are low;
- barriers to ULLS and USS expansion are low; and
- the retail broadband market in Australia is characterised by high churn rates and low switching costs. These indicators are consistent with a highly competitive discipline on Telstra in the wholesale market.

In response to the Draft Decision, Telstra states that that there is a lack of understanding of the basic economic principles amongst submitters in relation to the

⁶² Telstra submission to the Discussion Paper, op cit, p. 23.

⁶³ Telstra, *Submission to the LSS Re-declaration inquiry – supplementary information and comments*, October 2007, pp. 4-5.

⁶⁴ *ibid*, p. 33.

substitutability between the ULLS and LSS. Telstra submits that “substitutability” does not mean that the potential substitute must be functionally identical, as asserted by submitters, in particular the CCC.⁶⁵

In contrast, Optus states that the ULLS, wholesale xDSL and HFC are not adequate substitutes for the LSS. Optus argues that although it is ‘technically possible’ for an access seeker to acquire the ULLS as a substitute for the LSS there are factors that impede this substitution, including:⁶⁶

- the price of the ULLS is substantially higher than the LSS, given the additional capabilities offered by the ULLS;
- additional infrastructure costs as a result of transitioning to the ULLS (i.e. voice switch, different type of DSLAM equipment); and
- barriers to competition in the local call market (including high sunk costs and competing with Telstra’s legacy incumbent position) that will make it difficult to establish a presence in the voice market in competition with Telstra.

Optus states that although HFC networks can be used to deliver high speed internet access, the limited coverage of the network, technical limitations and costs of rolling out further coverage means that it cannot competitively constrain Telstra’s pricing of the LSS in the short to medium term.

Optus also states that it is not feasible for a ULLS access seeker to resell a LSS service because:⁶⁷

- resale would require various rewired connections at exchanges and such rewiring is not a Telstra product;
- Telstra does not permit connections between access seeker DSLAMs; and
- when an access seeker purchases a ULLS service, the filter (splitter) is now typically hardwired in to the access seeker’s DSLAM rather than being separate as was more common in the past. As a result it is not possible for the voice and data portions of the line to be split before the access seeker’s DSLAM is reached.

AAPT asserts that there are no direct substitutes for the LSS and re-iterates the ACCC’s reasoning as part of the original declaration decision. AAPT states that:

“from an access seeker’s perspective, the LSS and ULLS will only be substitutable if the access seeker’s intent is to offer its customers a bundle of internet and voice services.”⁶⁸

AAPT also argues that it is not technically or commercially feasible for an ULLS access seeker to resell the LSS because of the infrastructure costs and the lack of willingness of end-users to purchase broadband and voice services from independent providers, other than Telstra.

⁶⁵ Telstra supplementary submission to the Draft Decision, op cit pp. 1-2.

⁶⁶ Optus submission to the Discussion Paper, op cit, p. 6.

⁶⁷ *ibid*, p. 11.

⁶⁸ AAPT/PowerTel submission to the Discussion Paper, op cit, p. 5.

Chime, Agile, Network Technology and Adam Internet state that there are no effective substitutes to the LSS and assert that substitutability of HFC networks is limited to select geographic areas.

In response to the Draft Decision, Agile submits that there is no migration path to move an end user from a LSS to ULLS and Telstra continues to insist there is insufficient industry demand to develop a process.⁶⁹

Agile also states LSS to ULLS migration involves disconnecting the end user from their data service for a period of at least 5 days. It asserts that a Telstra retail customer making the move from access seekers equipment to a Telstra BigPond service does not experience this 5 day delay, thus “the principle of Operational Separation is not being fulfilled”.⁷⁰

The CCC’s submission to the Draft Decision submits that the “major investment and risk hurdle” that access seekers face is equal for the LSS and ULLS. CCC states that there are no additional significant capital costs to move from the LSS to the ULLS except for marketing and service migration costs.⁷¹

The CCC further states that access seekers business plans remain committed to migrating to the ULLS but there have been delays in migration caused by Telstra. These issues have been notified to the ACCC and the CCC submits that is sufficient evidence that there is a “desire to migrate and not a resistance or indifference.”⁷²

Network Technology also states that migration to ULLS from LSS is a significant barrier:

“mass migration to the ULLS from the LSS remains almost impossible.”⁷³

Network Technology asserts that because Telstra has not provided a migration plan the only way of migrating to ULLS from LSS is to cancel the LSS service and then reapply as an ULLS customer. Network Technology submits that this option not only has cost implications but there is “unnecessary double handling” of lines by technicians and could be extremely disruptive to customers who lose their service for more than a week.⁷⁴

ACCC’s views

The ACCC considers that Telstra has significant market power in the upstream market relevant to the declaration inquiry. This view is based on several factors.

First, it is evident that Telstra still controls the infrastructure by which the overwhelming majority of broadband and voice services are provided. While the

⁶⁹ Agile, *Agile submission in response to the ACCC Review of the Line Sharing Service Declaration*, September 2007, p. 2.

⁷⁰ *ibid*, p. 2.

⁷¹ CCC, *CCC submission to the Draft Decision on Declaration of the Line Sharing Service*, September 2007, p. 3.

⁷² *ibid*, p. 3.

⁷³ Network Technology, *Network Technology submission to the Line Sharing Service Draft Declaration Decision*, September 2007, p. 2.

⁷⁴ *ibid*, p. 2.

ACCC's consideration of the relevant upstream market noted that there are a number of potential functional substitutes for the LSS, Telstra's common ownership of various broadband delivery platforms means that it is the dominant provider of services at the wholesale/access level relevant to the declaration. Telstra's dominance is evidenced by its ability to withhold supply of ADSL2+ services in exchanges except where competitors are offering ADSL 2+ services.

Approximately 80 per cent of Australian broadband subscribers use a form of xDSL delivered over Telstra's copper network.⁷⁵ The second most common broadband platform is HFC cable, with 17 per cent of broadband subscribers, while 3 per cent of subscribers use other technologies.⁷⁶ In addition to owning the near ubiquitous copper network, Telstra also owns the largest HFC network in Australia. The limited geographical supply of competing HFC networks, in combination with Telstra's common ownership of the largest HFC network and copper CAN and the lack of third party access provisions, suggests that HFC networks are unlikely to place a significant competitive constraint on the provision of the LSS. However, as noted in its Fixed Services Review, in the future the ACCC intends to examine competitive dynamics at a more geographically disaggregated level with the aid of empirical data.

Notwithstanding the current absence of granular information, the ACCC is not aware of significant alternative fixed line networks, aside from Optus' HFC network, that could provide similar functionality to ADSL for the provision of high-speed broadband services.

The majority of retail broadband services are provided by Telstra via ADSL technology and competitors using Telstra's wholesale xDSL products. Therefore, wholesale xDSL services are unlikely to provide a competitive constraint on the LSS. In 2006, iinet, PowerTel, Optus, Nexstep and Agile were in the process of actively wholesaling or establishing commercial arrangements for wholesaling their ADSL2+ networks to other ISPs.⁷⁷ While these developments have the potential to facilitate wholesale infrastructure competition in the broadband market, it is worth noting that these competitors remain reliant on access to Telstra's ULLS. Telstra has provided some high level information on arrangements in the wholesale market for broadband services.⁷⁸ However, the mere presence of these wholesale arrangements is not indicative of effective competition in the upstream market for broadband services. Moreover, these arrangements are unlikely to promote effective competition in downstream markets in the same way as the LSS given that the use of wholesale xDSL products limits an access seeker's ability to compete across quality, price and functionality dimensions. In November 2006, Telstra announced plans to offer ADSL2+ services in exchanges where competitors are also offering ADSL2+ services. Telstra also announced that it would commence retailing and wholesaling ADSL plans at speeds of up to 8 Mbps where ADSL2+ services are not available.

⁷⁵ OECD, *OECD Broadband Statistics to June 2006*, 13 October 2006.

⁷⁶ ACCC, *Telecommunications Competitive Safeguards Report, 2005-06*, p. 28.

⁷⁷ *ibid*, p. 14.

⁷⁸ Telstra, *Telstra submission to the LSS Re-declaration inquiry – supplementary information and comments*, October 2007, pp. 4-5.

Prior to these announcements Telstra capped the speed of its wholesale ADSL services to a maximum of 1.5 Mbps to its wholesale ISP customers.⁷⁹

The number of ULLS and LSS services in operation has grown rapidly in the last year, however remains relatively modest compared to the total number of broadband lines. According to information provided by Telstra as at September 2007, there were [c-i-c] ULLS and [c-i-c] LSS lines in operation.

In 2005-06, Telstra remained the main supplier of local access services, with over 88 per cent of total lines, while Optus (4.2 per cent) and 'Other lines' (7.5 per cent) accounted for the residual.⁸⁰ In terms of voice functionality, the ACCC notes that it is premature to consider VoIP services as competitive substitutes to PSTN voice services. Despite the increase in the number of VoIP service providers, in the period from January 2005 to June 2006, only 4.8 per cent of Australians were using VoIP for phone calls.⁸¹ However a further 13 per cent of consumers said that they were 'likely to use VoIP in the next 12 months', which perhaps signals that there is some significant potential for growth in the use of VoIP services.⁸² That said, there are consumer concerns with respect to the universality, security and quality of VoIP that need to be addressed before it can become a credible threat to Telstra's dominance.

Second, there are significant barriers to entry in the provision of wholesale broadband and fixed voice services, including high sunk costs of infrastructure investment; economies of scale and scope arising from Telstra's control of the ubiquitous copper network; and significant time delays in developing alternate networks. The ACCC notes that there are a number fixed and mobile wireless networks currently being deployed that are capable of providing voice and broadband services. However, these developments are still in their early stages and it is an open question as to what extent services on these new networks will offer viable alternatives to those services provided via Telstra's copper CAN.

Third, Telstra is vertically integrated into downstream markets and enjoys a strong position in retail markets for broadband and fixed telephony services. This factor may further affect the potential for competitive entry in the upstream market. A large retail customer base is typically necessary to justify investment in infrastructure before a new entrant can compete effectively with Telstra. In addition, telecommunications consumers face high costs of switching between retail suppliers. Supply contracts typically involve a fee for the costs of physically disconnecting and churning customers. These costs, in addition to general information asymmetries about the range of competitors' products, mean that consumers tend not to change their service provider unless there is a compelling reason to do so.

⁷⁹ Telstra Media Release, *BigPond marks 10th Anniversary with launch of national High Speed Broadband*, 10 November 2006.

See http://www.telstra.com.au/abouttelstra/media/announcements_article.cfm?ObjectID=38597
⁸⁰ Source: Telstra and Optus public reports and ACMA Communications Report 2005-06. Other fixed access lines includes the number of fixed lines corresponding to other Telstra networks (for example, ISDN lines of which there are approximately [c-i-c] in operation) and CBD and regional networks.

⁸¹ ACMA, *Communications Report 2005-06*, p. 65.

⁸² *ibid.*, p. 39.

Downstream markets relevant to the declaration

Submissions

Optus asserts that there has been increased competition in the downstream high speed carriage services market since, and as a result of, the declaration of the LSS in 2002.⁸³ In particular, Optus contends that that declaration of the LSS has facilitated the competitive entry of many ISPs and has led to competition in the retail broadband market.⁸⁴ In this regard, Optus notes:

“the number of ISPs deploying their own ADSL network infrastructure has increased from 9 in the period 2004 to 2005 to 19 in the period 2005 to 2006.”⁸⁵

Although Optus agrees that there is now competition in the broadband market it states:

“it is still concerning that competition is largely restricted to exchanges servicing major metropolitan regions. This is evidenced by Telstra only offering ADSL2+ services only in those exchanges where competitors are offering such services, even though it has installed the technology across every exchange.”⁸⁶

Telstra submits that the market in which the LSS is supplied is workably competitive because, amongst other things, the retail broadband market in Australia is characterised by high churn rates and low switching costs.⁸⁷

Telstra states that it faces a number of competitors in the retail market for broadband services, namely:⁸⁸

- competitors with own fixed networks (typically fibre), i.e. Optus and TransACT;
- wireless networks;
- ISP resellers; and
- ULLS based and LSS based carriers.

Telstra states that its retail broadband market share has declined from 50 per cent in 2002 to 40 per cent in 2006. Telstra also asserts that its churn rates indicate that the market is competitive.⁸⁹

AAPT states that there are no effective substitutes to the LSS, therefore in the absence of declaration there would not be any services to constrain the pricing of LSS or incentives for Telstra to even make the service available.

⁸³ Optus submission to the Discussion Paper, op cit, p. 12.

⁸⁴ *ibid*, p. 12.

⁸⁵ ACMA, *Communications Services Availability in Australia 2005-06*, November 2006, p. 14 in Optus' submission, p. 12.

⁸⁶ Telstra Media Release, *BigPond marks 10th Anniversary with launch of National High Speed Broadband*, , 10 November 2006 in Optus' submission, p. 12.

⁸⁷ Telstra submission to the Discussion Paper, op cit, p. 33.

⁸⁸ *ibid*, p. 31.

⁸⁹ *ibid*, p. 32.

Chime, Agile, Network Technology and Adam Internet consider that the structure of the market has not yet proffered enough options to sustain a high level of competition without the existence of the LSS.

In response to the Draft Decision, Network Technology states that apart from the LSS there is no viable alternative service that could be used to provide internet services to its customers. Network Technology submits that its investment in DSLAM infrastructure and customer base would be stranded because Telstra would price it out of the market.⁹⁰

Optus submits that, “the local call market is currently highly concentrated and uncompetitive.”⁹¹ In support of its argument, Optus refers to the ACCC’s *Market Indicator Report 2004-05* to show that Telstra remains the largest provider of local telephony. Optus asserts that this is due to the large barriers to entry and Telstra’s legacy position as the incumbent.

Optus states that VoIP services have been increasing and are likely to further increase competition in the local call market, as VoIP has the potential to overcome barriers to entry. In this regard, Optus notes that there are 224 service providers in Australia that support approximately 110 000 registered VoIP subscribers.⁹²

AAPT states that VoIP is not an effective substitute for traditional voice services because:⁹³

- quality of VoIP depends upon quality of end-user’s handset, home network, broadband connection, service provider and the internet;
- the ability of end-user to place a call over VoIP depends upon equipment used by Party B and if Party B uses VoIP and the same provider;
- networks may not be able to recognise the location of Party A and may be unable to map, or correctly map the call;
- security vulnerabilities exist; and
- VoIP relies on mains power – that is, an end-user could not use the phone in the event of a power failure.

Telstra states that bundling of voice telephony and broadband is not a barrier to existing LSS entrants switching to ULLS as access seekers are able to replicate Telstra’s wholesale and retail data and voice service offerings.

⁹⁰ Network Technology submission to the Draft Decision, op cit, p. 1.

⁹¹ Optus submission to the Discussion Paper, op cit, p. 13.

⁹² IDC (2007) *Market Analysis, Asia/Pacific (Excluding Japan) Consumer VoIP 2007-2011 Forecast and Analysis*, February 2007, p. 38 in Optus’ submission at p. 14.

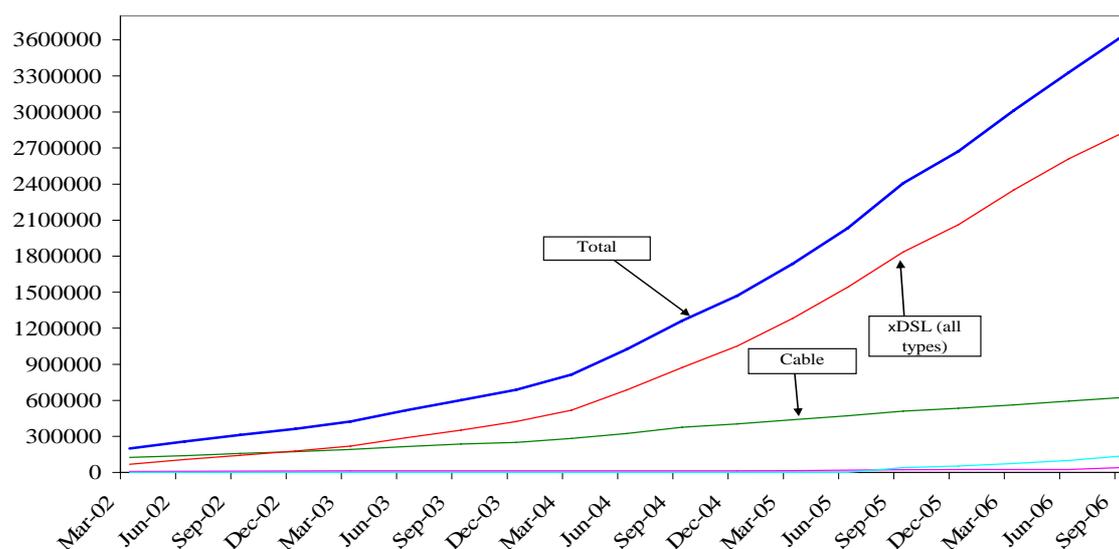
⁹³ AAPT /PowerTel submission to the Discussion Paper, op cit, p. 3.

ACCC's views

High bandwidth carriage services

As at September 2006, there were approximately 3.7 million broadband services in operation, an increase of 51 per cent on the previous year. This represents a significant increase from just over 200,000 broadband services in operation in 2001-02. The graph below shows broadband take-up – by technology type – over the period March 2002 to September 2006.

Graph 1 – Broadband take-up: by technology



Source: ACCC Broadband Snapshot

Retail broadband competition, mainly through ADSL services, has largely been driven by an increasing number of providers reselling Telstra's wholesale services. Since 2002, the market share of DSL resellers has been growing steadily, spurring the overall strong growth of broadband take-up that emerged during 2004-05.

While Telstra's competitors obtained shares of the growing broadband market, the overall shift from dial-up to broadband is also assisting Telstra, which has been successful in acquiring a significant share of new broadband customer acquisitions. Table 4 below indicates that Telstra has 40.0 per cent market share of the retail broadband market with the majority of retail competitors reliant on wholesale DSL.

Table 4 – Retail broadband market shares

	Telstra	Optus	DSL resellers	Others
2002	52.5%	28.8%	15.3%	3.4%
2003	50.4%	20.7%	25.6%	3.3%
2004	48.3%	13.8%	34.5%	3.4%
2005	40.3%	15.6%	40.7%	3.4%
2006 (estimate)	40.0%	17.5%	34.2%	3.5%

Notes: Telstra and Optus include cable and DSL

Source: Budde Comm 3G mobile phone subscription numbers–mobile phone usage 2006

Source: ACMA Communications Report 2005-06

The ACCC noted in its *Telecommunications Competitive Safeguards Report, 2005-06* that greater broadband use and take-up has encouraged ISPs to go beyond reselling Telstra’s wholesale services and proceed with new broadband infrastructure rollouts via use of the ULLS or LSS and investment in associated DSLAM infrastructure. ULLS and LSS take-up has been initially slow, and the total number of these lines remains relatively modest compared to the total number of broadband lines. Notably though, confidential data provided by Telstra to the ACCC indicates that take-up of each of the ULLS and LSS grew in the order of [c-i-c] per cent and [c-i-c] per cent respectively in the period from January to September 2007.⁹⁴

These network investments have been driven by a combination of ISPs reaching sufficient customer density thresholds in exchanges through the resale of ADSL, a reduction in ULLS and LSS prices as determined in access disputes, and falling equipment prices.⁹⁵ ACMA identified 19 ISPs that were deploying their own DSLAM infrastructure during 2005–06. This is an increase from the nine ISPs identified with infrastructure deployments in 2004–05.⁹⁶ Table 5 below⁹⁷ outlines the ISPs with DSLAM infrastructure.

⁹⁴ Telstra submission to the LSS Draft Decision, op cit, p. 3.

⁹⁵ Telstra, *Annual Report 2006*, p. 23.

⁹⁶ ACMA, *Communications Services Availability 2005–06*, 2006, p. 3.

⁹⁷ *ibid*, p. 5.

Table 5 – Internet service providers with DSLAM infrastructure

Service providers with own DSLAM infrastructure	DSL-enabled exchanges 30 June 2006*	DSL-enabled exchanges 31 January 2007*
AAPT	22	22
Adam Internet	25	29
Amcom	34	34
iiNet	245	266
Internode/Agile	47	73
Netspace Networks	na	20
Nextep	na	95
Onthenet	8	8
Optus	100	304
PowerTel	126	130
Primus	182	182
Regional Internet Australia**	6	6
Soul	na	22
Telstra	2,109	2,432
TPG	65	145
TransACT	na	9
TSN Internet	4	4
Wideband networks	1	2
Wideline	na	3

Source: service provider websites and ACMA targeted data request

*In many cases, multiple carriers have DSL available from the same exchange – therefore, the figures should not be added to infer a total number of exchanges with DSLAM infrastructure.

** Regional Internet Australia was placed in administration in April 2007.

na: not available

However, the ACCC notes that quasi-infrastructure competition is emerging unevenly in different parts of Australia. ACMA reports that, at January 2007, ADSL was provided by at least one service provider in 2432 exchanges around Australia. This compared with 2109 exchanges at June 2006.⁹⁸ Table 6 shows the number of infrastructure providers serving ADSL-enabled exchanges.

Table 6 – Number of DSLAM infrastructure providers by number of DSL-enabled exchanges

Number of infrastructure providers	Number of exchanges 30 June 2006	Number of exchanges 31 January 2007
1 infrastructure provider	1,800	1,973
2 infrastructure providers	115	163
3 infrastructure providers	61	80
4 infrastructure providers	67	62
5 or more infrastructure providers	66	154

Source: service provider websites and ACMA data request to targeted ISPs

Network deployments are helping to provide greater bandwidth to Australian broadband users, with ISPs increasingly deploying ADSL2+ broadband services capable of delivering speeds up to 24Mbps under optimal conditions to end-users who live close to their exchange. Consumers and businesses in metropolitan areas are now able to access through-put speeds well in excess of the 1.5 Mbps to which they may

⁹⁸ ACMA/ACCC, *Communications Infrastructure and Services Availability in Australia 2006-07*, June 2007, p. 6.

have previously been limited. In this regard, connections with download speeds of 1.5Mbps or greater increased by 43 per cent in March 2007 to 1.56 million, compared to 1.09 million subscribers at the end of September 2006.⁹⁹

Despite these developments, Telstra is still in a strong position to reap the benefits of the developing broadband markets given the structural characteristics of telecommunications markets. Customer access services are an input necessary to supply broadband services to end-users. As discussed above, Telstra ownership of both the ubiquitous copper network and main HFC network in Australia means that it is the main supplier of these customer access services. Thus, Telstra is in a position where it controls access to the majority of inputs necessary for competition in downstream broadband markets. In addition, the networks that are capable of supplying high-bandwidth carriage services are expensive to build, involve large sunk costs and are characterised by large economies of scale. These factors suggest that deployment of competitive access networks is likely to be limited and competitors will continue to rely on access to Telstra's fixed inputs such as the LSS and ULLS in order to compete in downstream broadband markets.

Fixed voice services

Telstra is the dominant provider of retail fixed voice services. In 2005-06, Telstra retained large revenue market shares of local telephony (72 per cent), domestic long-distance (69.7 per cent), international calls (63.2 per cent) and fixed-to-mobile (75.5 per cent) services.¹⁰⁰

The ACCC's assessment of the state of competition in local telephony as part of its *Telecommunications Competitive Safeguards Report, 2005-06* found that:

While resellers have made some inroads to Telstra's retail market share in the provision of basic access and local calls, this has been minimal, and there are significant barriers to new entrants obtaining sufficient scale to compete sustainably. Further, the overriding characteristic of the market is that there is still a large degree of reliance on Telstra's network for the provision of local telecommunications services; hence there is very little infrastructure-based competition. These factors combine to provide the major source of Telstra's profitability and market power.¹⁰¹

The report stated that the greater take-up of VoIP in conjunction with DSLAM rollouts is a development that could, in the future, test the dominance of Telstra in local telecommunications. The report also noted that VoIP providers were a significant source of competition in the provision of domestic long-distance and international calls during 2005-06. Similarly, the ACMA noted a rapid increase in the number of Australian VoIP providers from 25 in May 2005 to 170 in June 2006, which included 118 providers supplying to the residential market.¹⁰² Market Clarity listed 270 VoIP providers in August 2007.¹⁰³ VoIP might also be expected to be a much more significant service in corporate markets than in residential markets at present. Nevertheless, the ACCC notes that only 18 percent of ISPs are currently providing VoIP services as part of bundled broadband internet packages – see Table 7

⁹⁹ ABS, *8153.0 – Internet Activity*, Australia, March 2007.

¹⁰⁰ ACCC, *Telecommunications market indicator report 2005-06*, August 2007, p. 5.

¹⁰¹ ACCC, *Telecommunications Competitive Safeguards Report 2005-06*, p. 20.

¹⁰² ACMA, *Communications report 2005-06*, October 2006, p. 65.

¹⁰³ Market Clarity, *Aussie VoIP list*, www.marketclarity.com.au/voip, accessed on 7 August 2007.

below (although this could perhaps be expected to grow).¹⁰⁴ The overall number of paying VoIP customers would not be expected to be high at present.¹⁰⁵ Moreover, there are consumer concerns with certain characteristics of VoIP services that suggest VoIP is not an effective substitute for traditional voice services at this time.

Table 7 – ISPs providing VoIP services as part of bundled offerings

	Very small (1–100 subscribers)	Small (101–1,000 subscribers)	Medium (1,001– 10,000)	Large (10,001– 100,000 subscribers)	Very large (100,000+ subscribers)	No. of ISPs
Internet bundled with VoIP	13	40	22	7	3	85
Total ISPs	124	119	112	22	10	467
% of ISPs offering VoIP	10	33	19	31	30	18

Source: ABS, 8153.0 *Internet Activity, Australia, Sep 2006*, unpublished data

Is declaration of the LSS required to promote competition?

The key question now facing the ACCC is whether the LSS declaration is required to promote competition in the relevant markets. This involves comparing a situation where the LSS is declared, to a situation where the LSS declaration is not declared ('with-without' test).

The following assessment examines the extent to which competition would be promoted by declaration in the market within which the eligible service is supplied and the markets within which relevant downstream services are supplied.

Submissions

Optus submits that a vertically integrated provider will have the incentive to discriminate in favour of its downstream operations and 'sabotage' access seekers. Therefore, Optus argues that Telstra would not have the incentive to offer a LSS on reasonable terms if declaration was removed.

Optus also argues that, in the absence of declaration, those access seekers only wishing to offer data services would not be able to compete on their merits or might be unable to remain in the market. Thus declaration of the LSS is required for access seekers to gain access to the LSS on commercial terms. Without the declaration, there would be a material decrease in competition in the downstream high speed carriage services market.

Optus suggests that continued declaration of the LSS will also stimulate competition in the local telephony market because there is the potential for VoIP to become a legitimate substitute. Optus expects the number of VoIP users to move in conjunction

¹⁰⁴ ACCC, *Telecommunications Competitive Safeguards Report 2005-06*, p. 27.

¹⁰⁵ For example, Engin estimated that it had 44 per cent revenue share of the Australian VoIP market with 52,500 paying subscriber lines at 31 December 2006, and 58,000 at 27 February 2007: Engin, *Engin revenue growth up 173 per cent and 44 per cent market share achieved*, ASX announcement, 28 February 2007.

with the expansion of fixed and wireless broadband networks, however, concedes that the VoIP is at a premature stage. Optus states that continued declaration of the LSS will encourage ISPs to enter the VoIP market, which will increase competition and influence prices in the fixed line local call market.

Telstra states, in its submission to the Discussion Paper, that it is constrained in the markets relevant to the LSS declaration, therefore re-declaration would not affect the level of competition in the relevant markets.¹⁰⁶

In this regard, Telstra states that:

“if LSS is not re-declared and Telstra subsequently seeks to raise the price of the LSS above competitive levels (or withdraw the service entirely), existing LSS access seekers could purchase alternative wholesale inputs to continue providing retail service offerings.”¹⁰⁷

Telstra also submits that the presence of the regulated ULLS alone is sufficient to ensure the wholesale market for broadband services remains workably competitive if LSS were not re-declared.¹⁰⁸ Telstra also states that bundled broadband and voice services would not be compromised if the LSS was not re-declared.

In response to the Draft Decision, Telstra states that the LSS is not an ‘enduring bottleneck’ because there are numerous upstream and downstream substitutes, particularly the ULLS. Telstra suggests that evidence of this is the fact that there has been an [c-i-c] increase in ULLS numbers as at January 2007 compared to [c-i-c] for LSS. Telstra notes that while the growth in ULLS has been associated with PSTN/ADSL2+ wholesale and retail product bundles, there has also been the emergence of wholesale and retail naked DSL products.¹⁰⁹

Telstra further submits that the Commission’s arguments rejecting the ULLS as an effective substitute for the LSS are inadequate because:¹¹⁰

- it is an “irrelevant consideration” that it owns the copper network that supplies both the LSS and ULLS;
- it is “untrue” that there are high barriers to entry in the provision of wholesale broadband services;
- that its vertical integration is an “irrelevant” consideration and;
- the Commission’s view is “ill-conceived” that the ULLS provides a level of functionality over and above that of the LSS. Telstra states that an access seeker could generate additional revenue streams from the additional functionality through both voiceband and broadband services. Telstra states that access seekers can also use the ULLS to provide broadband services over naked DSL.

¹⁰⁶ Telstra submission to the Discussion Paper, op cit, p. 33.

¹⁰⁷ *ibid*, p. 23.

¹⁰⁸ *ibid*, p. 23.

¹⁰⁹ Telstra submission to the Draft Decision, op cit, p. 2.

¹¹⁰ *ibid*, p. 4.

Telstra also states in its submission to the Draft Decision that the two issues identified by the Commission relating to the ability of LSS access seekers to transition to the ULLS are not supported because:¹¹¹

- market evidence shows that a new entrant into the broadband market or existing LSS access seeker looking to expand faces no material barriers to using ULLS to supply broadband services or broadband in combination with voice; and
- Telstra already advised the Commission that it has not developed an MNM product for LSS to ULLS transition because there is no registered interest.

In conclusion, Telstra asserts that:

“the bottom line is that LSS should not be declared and does not need to be declared in order to constrain Telstra’s providing of wholesale and retail broadband services. Telstra faces intense competition from ULLS-based providers, from fixed and mobile wireless network providers and from alternative network providers.”¹¹²

Chime, Agile, Network Technology and Adam Internet contend that in the absence of re-declaration, competitive rates for the LSS are unlikely to be achieved via commercial negotiation.¹¹³ The submissions argues that given there are nine access disputes in relation to price and non-price terms of the LSS, which arose from unsuccessful negotiation attempts with Telstra, this indicates that there would be an imbalance in bargaining power without declaration.

Chime asserts that:

“the LSS is an element of the fixed-line network that continues to represent an enduring bottleneck and as such necessitates the need for declaration under Part XIC of the *Trade Practices Act 1974* (the Act) in order to promote the LTIE.”¹¹⁴

Chime, Agile, Network Technology and Adam Internet also state that it would not be financially viable for these providers to revert to a pure resale business model nor restructure their business operations to provision broadband services over the ULLS in the short to medium term. Chime notes that the lack of a managed migration path for LSS to ULLS presents an additional impediment to transitioning to ULLS-based provision.

In response to the Draft Decision, Adam Internet states that declaration will ensure competition in the DSL market and protect the LTIE. Adam Internet argues that LSS declaration has facilitated growth in broadband because service providers have been able to compete for consumers on a merits basis.¹¹⁵

¹¹¹ *ibid*, pp. 7-8.

¹¹² Telstra, *Telstra submission to the LSS Declaration Draft Decision*, September 2007, p. 12.

¹¹³ Chime, *Submission in response to the Line Sharing service (LSS) Declaration Inquiry*, April 2007, p.1.

¹¹⁴ *ibid*, p. 3.

¹¹⁵ Adam Internet, *Adam Internet submission to the Line Sharing Service (LSS) Draft Declaration Decision*, September 2007, p. 1.

Adam Internet asserts that this growth has:

“...provided considerable benefits to consumers, including greater diversity in products, lower prices and an increased focus on customer service.”¹¹⁶

Network Technology, in its submission to the Draft Decision, also asserts that LSS is “vital” to ensure continuing competition in the DSL market and to protect LTIE. Network Technology submits that the LSS has resulted in end users enjoying considerable benefits such as better customer service, greater diversity in products and a wider availability of service and products.¹¹⁷

AAPT states that in absence of declaration Telstra would likely increase the price of LSS, restrict supply of LSS, or refuse to supply LSS, thus disrupting many of the access seekers’ business plans.

The CCC submits that if the LSS were not re-declared Telstra would either cease to offer the LSS immediately or increase the price of the service, making it commercially unviable for a competitor to use it thereby forcing competitors out of the broadband market.

ACCC’s views

Is there effective competition in the upstream market for the eligible service?

In 2002, the ACCC concluded that it was satisfied that the LSS would be delivered with or without declaration. However, it considered that the terms and condition upon which it was provided was crucial to the development of competition in downstream markets, and therefore the LTIE. The ACCC noted that declaration was a means by which incumbents are obligated to provide access on reasonable terms and conditions. The ACCC considered that the provision of the service at the upstream level at terms and conditions consistent with those that would be seen in a competitive market could promote competition in downstream markets.

For the purposes of this current inquiry, the ACCC will need to examine whether declaration of the LSS is required to ensure that this service will be provided on reasonable terms and conditions to access seekers. A key issue in this regard is the level of competitive constraints that operate in the upstream market for the eligible service.

The ACCC’s analysis indicates there is ineffective competition in the market for the eligible service due to the structural characteristics of the market. In particular, Telstra owns the ubiquitous copper network across which both the LSS and ULLS are provided, as well as owning one of the two major HFC networks in Australia. While there is substantial (approximately 80 per cent) overlap between Optus’ and Telstra’s HFC networks, the geographic coverage of these networks is limited in comparison with the copper network. Moreover, the ACCC does not consider that the presence of only two vertically-integrated competing networks under this scenario would necessarily be sufficient to ameliorate the need for ex-ante regulation in these

¹¹⁶ *ibid*, p. 1.

¹¹⁷ Network Technology, *Network Technology submission to the Line Sharing Service Draft Declaration Decision*, September 2007, p. 1.

geographic areas. The ACCC is not aware of any plans for either party to extend the geographic footprint of the HFC networks. In addition, third party access to HFC networks for the delivery of broadband and voice services is not mandated, and is not being provided by either Telstra or Optus. The ACCC notes that, while there are a number of fixed and mobile wireless networks currently being deployed, these developments are still in their early stages. It is an open question as to what extent services on these new networks will offer viable alternatives to those services provided via Telstra's copper CAN.

These factors, in combination with the fact that Telstra is the only current supplier of LSS, the high barriers to entry in the provision of wholesale broadband services and Telstra's vertical integration suggest that the ability and incentive for Telstra to either deny access or charge at supra-competitive levels remains strong.

Telstra's conduct in the market since declaration of the LSS in 2002 also suggests that, absent declaration, access to the LSS is unlikely to be provided on reasonable terms and conditions. As outlined above, Telstra has twice submitted sets of undertakings about the price of the LSS since declaration in August 2002. Both have been rejected by the ACCC. Telstra appealed the ACCC's December 2005 decision to reject its December 2004 monthly charge undertakings to the Australian Competition Tribunal. In June 2006, the Tribunal upheld the ACCC's decision to reject the LSS monthly charge undertakings on the basis that it could not be satisfied that the terms and conditions of the undertaking were reasonable.¹¹⁸ The ACCC is currently arbitrating 6 disputes in relation to LSS and has set a monthly charge of \$2.50 per LSS in three other recently completed final determinations. This is considerably below Telstra's offers to the market as part of its most recent undertakings and the proposed charges in recently completed arbitrations.

Is the LSS declaration still required to promote competition in the relevant downstream market(s)?

The extent to which competition would be promoted by declaration in the market within which the eligible service is supplied is a necessary part of the ACCC's analytical framework. However, declaration of a service is not intended, and is not likely, to have the effect of inducing (or undermining) entry and competition in the market for the eligible service. Rather, the ACCC is principally concerned with whether declaration will promote competition in the relevant downstream markets. To this end it is useful to consider the outcomes in relevant downstream markets in the situation where the LSS remains declared, to a situation where the LSS declaration is removed.

The LSS is an important upstream input for the supply of high speed broadband services to end-users. In particular, the LSS enables access seekers to compete over all downstream dimensions (product-price-service package) of broadband supply. The ACCC notes the LSS has been used by ISPs such as iinet and internode to be first to market with high-speed broadband services via ADSL2+ technology. These access seekers have been able to fully utilise the functionality of the LSS to compete aggressively on the basis of high quality, differentiated retail broadband offerings.

¹¹⁸ Australian Competition Tribunal, *Telstra Corporation Limited (ACN 051 755 556)*, [2006] ACompT 4.

The fact that Telstra has commenced providing ADSL2+ services in only those exchange areas where competitors are offering ADSL2+ (despite having the capacity to offer ADSL2+ in many more exchanges) suggests that quasi-facilities-based competition based on access to the LSS (and the ULLS) has been effective in promoting rivalry, customer choice and innovation in the retail broadband market. The LSS, in particular, promotes customer choice as it enables end-users to simultaneously acquire voice and ADSL services from different quasi-facilities-based providers on the same line.

Based on the ACCC's assessment of the state of competition, declaration is likely to promote quasi-facilities-based competition in the provision of downstream high-bandwidth carriage (broadband) services. Declaration is likely to facilitate further competitive entry and investment by competitors interested in providing the broadband only services. As competitors reselling ADSL services continue to build retail customer scale at the exchange level, this may lead to increased uptake of the LSS and increased investment in DSLAM infrastructure. In this context, access to the LSS on reasonable terms should lead to the promotion of the LTIE by ensuring access seekers are better able to compete with Telstra across all dimensions (price-product-service package) of downstream supply. This should generate lower prices for end-users and a greater range of better quality service offerings.

The LSS is also being used by some access seekers to offer VoIP services to end-users. The ACCC considers that VoIP services are unlikely to represent a viable or widespread substitute to PSTN voice services at this time. This view was supported by the majority of submissions to the Discussion Paper. However, as LSS uptake increases, and broadband penetration and access speeds increase, the use of VoIP technology for both local and other call services is likely to become a more viable alternative to the traditional circuit-switched network. In this context, declaration of the LSS may also assist in promoting competition in the downstream fixed voice services market.¹¹⁹

In the absence of the LSS declaration, access seekers will have the following options available for competing in the downstream high-bandwidth carriage services market:

- resale of Telstra's wholesale DSL broadband services;
- acquiring the LSS on non-regulated terms and conditions;
- acquiring the ULLS; or
- deployment of competing forms of standalone infrastructure capable of providing end-to-end services.

The ACCC considers that reselling Telstra's wholesale DSL services provides limited scope for competition since wholesale customers are subject to Telstra's control over the price, quality, and terms and conditions of access to wholesale DSL. In turn, end-users will be reliant solely on Telstra's choices in terms of product and quality of service offerings. In this regard, it is worth noting that the through-put speeds of

¹¹⁹ However, it is possible that the current requirement to have a PSTN voiceband service on the LSS line may have the effect of chilling the incentives for providers to offer VoIP services to consumers.

wholesale DSL services are considerably below the ADSL2+ theoretical maximum speed of 24 Mbps. In contrast, the LSS enables access seekers compete with Telstra across in all dimensions (price-product-service package) of downstream supply.

The structure of the market for the LSS confers significant and ongoing market power upon Telstra in the negotiation of terms and conditions for the service. In this regard, the ACCC considers it unlikely that Telstra's commercially agreed prices for the LSS would be consistent with the LTIE, absent the declaration. As noted above, Telstra has twice submitted sets of undertakings about the price of the LSS since declaration of the LSS in August 2002. Both have been rejected by the ACCC. The LSS is also the subject of six access disputes currently being arbitrated by the ACCC (and a further three disputes have recently been the subject of final determinations). In recently completed LSS access disputes, Telstra has proposed a LSS monthly charge of \$9. This is considerably above the \$2.50 price which the ACCC considered to be reasonable in its final determinations.¹²⁰ These factors suggest that access seekers relying on commercially negotiated access to the LSS may be restricted in their ability compete with Telstra in downstream markets. Consequently, absent the declaration, the benefits of competition in downstream markets, including lower prices for end-users and a greater range of better quality service offerings, may not be realised.

The substitutability between the LSS and ULLS was an issue raised by a number of submitters. The ULLS would serve the functional needs of LSS access seekers in terms of enabling the provision of xDSL services in downstream markets. However, ULLS would not appear to be an effective substitute for the LSS as it provides functionality beyond what is capable via the LSS and is accordingly priced considerably above the LSS. Therefore it is not evident that the ULLS would place an effective competitive constraint on Telstra in the event that it was to increase the price or reduce the quality of the LSS over a prolonged period. Access seekers using the ULLS would need to, in most circumstances, provide voice services to the end-user in order to make ULLS-based provision commercially viable. Therefore, the ULLS may not be considered a direct substitute for the LSS in the case where the access seeker is only interested in providing a broadband service to end-users. The ACCC acknowledges that certain market developments that may increase the degree of substitutability between the LSS and the ULLS. These include increased consumer preferences for bundled retail fixed voice and broadband services; customer acceptance of VoIP services as a viable and widespread substitute for PSTN voice services; and/or increased demand for naked DSL services. However, as noted above, current markets conditions suggest that these demand patterns are only occurring to a limited extent and are not sufficiently strong to conclude that the ULLS and LSS are close substitutes at this time. In practice, innovation and consumer choice in the supply of high speed broadband services has been driven by access seekers, such as internet service providers, using the LSS to deliver ADSL 2+ services to end-users.

This suggests that while ULLS-based provision would allow some access seekers to compete as quasi-facilities-based providers across both voice and broadband services, the absence of a LSS declaration will likely lead to some current retail providers reverting to wholesale DSL-based provision or exiting the market altogether, even in

¹²⁰ See for example ACCC, *Access dispute between Chime Communications and Telstra - LSS - publication of final determination and associated statement of reasons*, Jun 07, published 8 August 2007, p. 26.

the case where continued service provision might be efficient. This would limit the extent of competition across the product-price-service package elements of retail broadband services, compared to the scenario in which the LSS is declared.

Relying on ULLS-based competition in the absence of regulated LSS would also mean that quasi-infrastructure-based competition based solely on broadband services may be compromised. This is because there is typically a single copper pair connecting a customer premise, and there will generally not be a spare pair for a ULLS provider to acquire whenever an access provider has an ongoing need for that pair so as to provide a PSTN service. Further, provisioning an additional pair would generally not be feasible, and ULLS-based suppliers will have to win both the DSL service and the PSTN voice service (unless the end-user wants naked DSL only and, as discussed above, both the supply of and demand for naked DSL would appear limited at this point). Effectively, under ULLS-based supply, quasi-facilities-based competition will generally become 'for the customer' rather than for individual services supplied to the customer. Under this supply scenario, consumer choice would be limited as end-users would no longer be able to acquire voice and ADSL services from different quasi-facilities-based providers on the same line.

The ACCC considers that such outcomes would likely reduce competition, customer choice and innovation in the supply of broadband services and therefore would not be in the short-term or the long-term interests of end-users.

While the ACCC does not consider that the ULLS is an effective substitute for the LSS at this time, some submissions note that access seekers could use access to the LSS as a transitional step towards the development of their own alternative voice infrastructure using the ULLS.

In terms of existing LSS access seekers transitioning to ULLS-based supply, the following potential barriers were identified in submissions:

- the sunk costs of ULLS-based supply, including voice switching and gateway infrastructure costs and retailing costs of voice services;
- the higher costs of ULLS compared with the LSS;
- the establishment of managed migration provisions for LSS to ULLS transition;
- LSS disconnection charges; and
- retail bundling.

These are similar to the barriers that a new ULLS entrant would face in entering the market. Based on the available evidence, it appears that none of these factors would constitute insurmountable barriers to transition. However, the ACCC notes that a number of submissions assert that the current lack of network migration process for the large scale cutover of LSS to ULLS may limit the ability of access seekers to seamlessly transition to ULLS. Telstra states that this is due to the lack of demand for this service by access seekers and at this stage there is no proposed date for the

establishment of any such systems.¹²¹ The ACCC considers that the lack of migration processes and safeguards may create uncertainty and risk for access seekers wishing to transition to ULLS-based supply. This is an issue the ACCC believes could be examined further by industry participants through the Communications Alliance.

While this issue is not a determinative factor in the ACCC's current decision regarding whether the LSS should be declared, it may become increasingly important in the ACCC's future consideration of the LSS declaration, in the context where markets developments mean that the LSS and ULLS are direct substitutes. In particular, any decision not to declare the LSS in the future would need to involve a transition period, dependent first on having a seamless and effective migration path. The interrelationship between the LSS and ULLS will be a key issue examined in the ACCC's proposed holistic review of fixed line service declarations.

Absent the declaration, another option for competitors delivering downstream services is the deployment of competing forms of standalone infrastructure capable of providing end-to-end services. In considering this alternative, the ACCC notes that the ongoing presence of natural monopoly cost characteristics across particular elements of the fixed networks means that full-facilities based competition is unlikely to be efficient or commercially feasible in most scenarios. Competing fixed-line infrastructure is limited to high density CBD and metropolitan areas at this current time and may remain so into the future.

While the barriers to entry to the deployment of intermodal infrastructure such as wireless networks may be lower than for fixed line networks, it may still only be efficient to deploy such networks in specific geographic areas and the development of this infrastructure will take time. These types of networks may also be limited in providing viable alternatives, in terms of quality, functionality and price, to those retail broadband services provided via Telstra's copper CAN. Therefore, compared with access to Telstra's ubiquitous fixed line network, competitors relying on competing standalone infrastructure may be limited in the addressable market available to them and the quality of broadband services that they can provide to end-users. Absent the LSS declaration, this supply option is likely to limit the extent and form of competition in the downstream high-bandwidth carriage services market.

Conclusion

The ACCC is of the view that the LSS is an important input for the promotion of competition in the provision of downstream high-bandwidth carriage (broadband) services. By allowing access to the high frequency portion of an unconditioned local loop, the LSS enables access seekers to compete over all downstream stages of the production process in the provision of high-speed broadband services.

The ACCC notes that there are wholesale/access services available as alternatives to the LSS for providing retail broadband services. These are available in various geographic areas of Australia. However, these supply options do not currently provide an effective substitute for the LSS in terms of underlying functionality and/or geographic coverage. Therefore the ACCC considers that reliance on these alternatives would limit an access seeker's ability to effectively compete across

¹²¹ Telstra supplementary submission to the LSS Draft Decision, op cit.

product-price-service package dimensions of broadband supply, compared to use of the LSS. In practice, innovation and consumer choice in the supply of high speed broadband services has been driven by access seekers, such as internet service providers, using the LSS to deliver ADSL 2+ services to end-users.

The current structure of the market for the LSS confers significant and ongoing market power upon Telstra in the negotiation of terms and conditions for the service. At this time, Telstra remains the sole supplier of the LSS. Under these conditions, Telstra could therefore withhold supply of the LSS or set prices at supra-competitive levels absent the declaration.

The ACCC considers that declaration of the LSS is likely to promote competition in the high-bandwidth carriage services market as this would lead to the eligible service being more likely to be provided on competitive terms and conditions. In turn, the ACCC believes this would lead to the promotion of the LTIE by ensuring access seekers are better able to compete with Telstra in downstream markets. This should generate lower prices for end-users and a greater range of better quality service offerings.

Declaration of the LSS may also assist in promoting competition in the downstream fixed voice services market by enabling access seekers to offer VoIP services to end-users. However, the ACCC notes that VoIP services are unlikely to represent a viable or widespread substitute to PSTN voice services at this time.

The above analysis indicates that declaration of the LSS should promote competition and the LTIE.

The ACCC recognises that communications markets are rapidly evolving and there are a number of potential developments that may increase the competitive constraints on Telstra as the sole LSS access provider. The ACCC is also mindful of the on-going need for robust empirical information as an input into its assessment of competition. In this regard, the ACCC, in March 2007, initiated a process under which it will collect (and regularly update) information regarding the nature and location of competing infrastructure in geographic areas of Australia.¹²² This information is intended to assist the ACCC in future considerations of Part XIC matters, including its proposed holistic review of fixed line services declarations.

¹²² ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

2.2 Will declaration achieve any-to-any connectivity?

The objective of ‘any-to-any’ connectivity is achieved if, and only if, each end-user of a service that involves communication between end-users is able to communicate, by means of that service or a similar service, with every other end-user even where they are connected to different telecommunications networks.¹²³

The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users.¹²⁴ When considering other types of services (such as carriage services that are inputs to an end-to-end service or distribution services such as the carriage of pay television), the ACCC considers that this criterion will be given less weight compared to the other two criteria.

The submissions to the Discussion Paper and Draft Decision assert that declaration of LSS will not affect the objective of encouraging any-to-any connectivity. The ACCC concurs with the view of submitting parties that declaration of a LSS is not expected to detract from the achievement of any-to-any connectivity.

¹²³ See s.152AB(8) of the Act.

¹²⁴ *Trade Practices (Telecommunications) Amendment Act 1997*, Explanatory Memorandum.

2.3 Will declaration encourage the economically efficient use of, and the economically efficient investment in, infrastructure?

When deciding whether declaration of a service will be in the LTIE, the ACCC is required to consider whether declaration would be likely to encourage:

- Economically efficient use of infrastructure, and
- Economically efficient investment in:
 - the infrastructure by which listed services are supplied
 - any other infrastructure by which listed services are, or are likely to become, capable of being supplied.

The ACCC addresses these issues from the perspective of considering the likely consequences ‘with’ declaration as opposed to those that could be reasonably expected ‘without’ declaration.

The ACCC’s consideration of each of these issues is outlined in turn below.

Submissions

Telstra submits that the ACCC should not be satisfied that re-declaration of the LSS will promote the efficient use of and investment in infrastructure. Telstra argues that:¹²⁵

- regulatory error in setting LSS prices is not only highly probably but, in fact, inevitable. Telstra argues that the difficulty in setting LSS prices is exacerbated by the absence of an efficient way in allocating common costs of the customer access line to LSS and voice-related services. If this is the case, then the likelihood of relative price distortions between ULLS and LSS is inevitable with serious efficiency consequences.
- LSS and ULLS are close substitutes and when prices of substitutes are regulated the regulatory damage is high if the price of any service is set too low. Further, Telstra notes that errors in setting LSS prices will distort carriers’ decisions between the various access alternatives as well as the broader “build” versus “buy” decisions. In particular, carriers will overuse the upstream services that are in an efficiency sense under-priced.
- further price distortions occur because the ACCC applies a different structure of regulated wholesale prices for ULLS and LSS. In particular, it notes that the ACCC has determined that ULLS prices are set on a geographically de-averaged basis; while LSS prices are averaged across different geographic areas.

¹²⁵ Telstra submission to the Discussion Paper, op cit, p. 35.

Furthermore, Telstra argues that LSS regulation would distort the competitive process as it would:¹²⁶

- create regulatory arbitrage opportunities where there are close substitutes;
- distort investment incentives of both service providers and access seekers – in particular, it would reduce the depth of facilities-based competition; and
- create incentives for regulatory gaming due to the regulation of close substitutes.

Telstra concludes that the removal of LSS regulation would enhance economic efficiency and promote competition. In particular, the removal of LSS regulation would:

- enhance competition as Telstra would be able to more fairly and effectively compete in downstream retail markets against competitors, which will intensify retail competition; and
- result in competitors moving to ULLS and facilities-based competition.

Telstra, in response to the Draft Decision, reiterates that LSS regulation would distort competition because there are multiple substitutes and concludes that the Commission could not possibly satisfy itself that continued declaration would promote the LTIE.

Telstra also claims that the LSS declaration compromises its commercial interests:

“...declaration is unnecessary for the promotion of the LTIE because the service in question is not an enduring bottleneck then it should be self evident that declaration will compromise the access provider’s legitimate commercial interests.”¹²⁷

Optus argues that declaration of the LSS service promotes the efficient use of infrastructure. In particular, Optus asserts that declaration of the LSS would have significant advantages as it would:¹²⁸

- promote allocative efficiency as it results in prices for the LSS that are closer to marginal cost than would otherwise be achieved commercially;
- promote productive efficiency as it would reduce Telstra’s network costs by taking data traffic off the PSTN network; and
- promote productive and dynamic efficiency by reducing the potential for inefficient duplication of the CAN.

Further, Optus argues that declaration of LSS will not discourage investment¹²⁹ by Telstra provided that appropriate pricing principles are established which ensure Telstra is able to recover its cost of investment for any given line on which a LSS is provided. Optus argues that given that LSS provides an additional source of revenue

¹²⁶ *ibid*, p. 49.

¹²⁷ Telstra submission to the Draft Decision, *op cit*, p. 12.

¹²⁸ Optus submission to the Discussion Paper, *op cit*.

¹²⁹ *ibid*.

for Telstra, it believes that declaration will provide positive incentives for Telstra to undertake efficient network investment.

In addition, Optus argues that declaration of LSS would result in increased investment by access seekers installing DSLAMs and associated network infrastructure. In particular, line sharing will provide new entrants with further incentives to:

- deploy a full range of services at exchanges where it was previously uneconomical to deploy because the cost of offering DSL based services without line sharing would be prohibitive; and
- achieve a return on investment at those exchanges which have already been deployed by giving access seeker the opportunity to deploy DSL services in an efficient manner.

The submissions provided by Adam Internet, Agile Communications and Network Technologies argue that declaration of the LSS in 2002 has significantly increased competition in the broadband market. This has led to lower prices, better quality and more innovative products and choice for end-users. Implicit in the submissions is the view that declaration has promoted allocative efficiency as it has led to access prices that are reflective of the underlying costs of providing the LSS.¹³⁰

In addition, these submissions argue that they do not consider that re-declaration would prevent efficient investment or encourage inefficient investment in infrastructure by which listed services are supplied. In this regard, the submissions assert that declaration of the LSS is particularly important for new entrants to use as a transitional step towards developing their own infrastructure for the use of ULLS and the supply of voice services to end-users.

AAPT¹³¹ notes that so long as pricing principles are correctly set, declaration of the LSS encourages economically efficient investment in infrastructure. In its submission AAPT argue that it is clearly inefficient for access seekers to duplicate Telstra's CAN but equally it is not desirable for access seekers to undertake no investment at all and simply rely on Telstra's resale services. Accordingly, re-declaration of LSS helps continue the progressive investment that has been adopted by many access seekers in the past. Moreover, the provision of voice and broadband services over a single copper loop promotes the efficient use of infrastructure.

AAPT also asserts that the application of TSLRIC principles to the LSS would ensure that there would be no impact on the ability of Telstra to invest in maintenance, improvement and expansion of its local loop infrastructure.

ACCC's views

Impact on efficient use of infrastructure

The ACCC considers that efficiency has three major components – allocative, productive and dynamic. In general, each of these forms of efficiency is enhanced when the prices of given services reflect the costs of providing these services. In more

¹³⁰ *ibid*, p. 3.

¹³¹ AAPT/PowerTel submission to the Discussion Paper, *op cit*, p. 11.

competitive markets, service providers have a greater incentive to lower prices in order to win market share. Accordingly, this incentive helps push prices towards costs, and thereby improves the efficient use of resources, and therefore infrastructure.

Where declaration is likely to promote competition in markets for carriage services or services provided by means of carriage services, the ACCC's competition analysis will generally help it to form a view about the impact of declaration on efficiency. For instance, where the ACCC finds that declaration can lead to greater competition in downstream markets by helping to ensure prices for the eligible service better reflect their efficient costs of provision, it is likely such declaration will also help to promote efficiency in use of telecommunications services.

By enabling greater competition in downstream markets, declaration would be expected to improve productive and dynamic efficiency in these markets by giving service providers the incentive to find lower-cost means of producing goods and services. This would also encourage both access providers and access seekers to invest and innovate in ways that will ensure they produce goods and services of a chosen quality at the lowest possible cost in the future. Further, the ACCC would expect allocative efficiency to be improved as it would be more likely that over time the final prices paid for retail services by end-users will better reflect the efficient costs of provision of these services.

In the language of subsection 152AB(2)(e), declaration will be expected to result in the more efficient use of infrastructure used to supply the eligible service. Conversely, a decision not to declare would, on this reasoning, lead to less competition in downstream markets and a less efficient outcome.

In 2002, the ACCC noted that a key consideration in determining the impact of declaration on investment (both in relevant upstream and downstream markets) is the price for the service that will prevail in the market following declaration.

Ultimately, the ACCC was not satisfied that Telstra would not have an incentive to set prices for the LSS that were consistent with those one would expect in a competitive market (due to, among other things, the prevailing market structure at that time). Therefore, the ACCC considered that this would be likely to distort signals provided to market participants with regard to whether it would be more appropriate to roll-out their own infrastructure or buy existing infrastructure capacity from access providers.

The ACCC concluded that declaration would help redress market power and unequal bargaining positions when parties negotiate the terms and conditions of access, and in turn ensure access prices better reflect costs – thus providing appropriate signals for access seekers' build/buy decisions and more efficient investment in infrastructure.

The ACCC's competition analysis leads the ACCC to believe that, in the absence of declaration, Telstra continues to face little competitive constraint when negotiating the prices and terms and conditions of access to the LSS. Under these conditions, the ACCC considers that Telstra might not have an incentive to set prices at levels consistent with those expected in a competitive market. As a result, in the absence of declaration Telstra is less likely to face the correct incentives to price its services in ways which promote the efficient use of infrastructure. Conversely, declaration provides access seekers with access to the declared service on reasonable terms and

conditions, and in doing so is likely to place competitive pressure on Telstra such that all parties will face the correct incentives to supply and price their services in ways which reflect more efficient use of the underlying infrastructure. Accordingly, the ACCC is of the view that declaration, as opposed to its cessation, is more likely to promote the efficient use of infrastructure.

Finally, in considering the impact of declaration of a service on the efficient use of telecommunications infrastructure, the TPA also requires the ACCC to consider whether it is 'technically feasible' to supply and charge for the eligible service when determining whether declaration would encourage the efficient use of infrastructure.¹³² In this regard, the ACCC must consider:

- whether supply is feasible in an engineering sense (i.e. having regard to the technology that is in use or available)
- the costs of supply and whether the costs are reasonable
- the effects, or likely effects, of supply on the operation or performance of telecommunications networks.

Given that the LSS has been declared and provided since 2002, the ACCC believes it is technically feasible to provide a LSS.

Incentives for efficient investment in infrastructure by which listed services are supplied

The incentives for efficient investment in existing infrastructure are predominately driven by pricing and demand considerations. The ACCC is of the view that declaration *per se* does not impact on the incentives for efficient investment in existing infrastructure.

The ACCC considers that the incentive for efficient investment in existing infrastructure is a matter for the setting of appropriate pricing principles. The ACCC agrees with the comments of submitters that the key factor in determining the impact of declaration on investment is the price for the service that will prevail in the market following declaration. The ACCC discusses the appropriate pricing principles that should apply for the LSS in Section 3 below. Declaration will encourage efficient investment in existing infrastructure to the extent that access prices enable the access provider to make a normal economic return on an investment, taking into account commensurate risk and returns that would be expected in a competitive market. Pricing principles for the declared service will be critical in promoting efficient build/buy decisions in relation to investment in infrastructure by service providers. This will also affect the extent to which different upstream access services are utilised by access seekers (eg. ULLS or LSS) and the level of investment in associated infrastructure (eg. DSLAM technology).

Nevertheless, declaration may promote efficient investment by reducing the investment risks in the context of an industry where investment is characterised by sunk costs and economies of scale. In this way declaration is likely to reduce barriers

¹³² Subsection 152AB(6)(a).

to market entry and have a positive effect on investment by access seekers. In the absence of declaration, the ability of access seekers to acquire the LSS, or to acquire it on reasonable terms and conditions, would be inhibited and it is reasonable to conclude that access seekers incentives for efficient investment in infrastructure may be distorted.

By enabling access to the LSS, declaration also provides competitive tension in the relevant markets such that it is reasonable to expect that incentives for efficient investment are likely to be promoted. In the absence of declaration, competition is likely to place less pressure on the incumbent to invest efficiently. The ACCC is therefore of the view that declaration of the LSS is likely to promote incentives for efficient investment in existing infrastructure.

Incentives for efficient investment in infrastructure by which listed services are capable of being supplied

Incentives for efficient investment can be considered from at least two perspectives—the incentive for Telstra to invest in new networks and the incentive for access seekers to invest in their own facilities or networks.

There are a number of intermodal platforms based on fixed-wireless, mobile-wireless and satellite technologies which may be used to provide broadband services to end-users. The ACCC considers that the incentive for Telstra and other service providers to invest in these alternative access technologies will again revolve around the issue of whether the LSS access pricing principles provide efficient build/buy signals to market participants.

Also relevant to this criterion is whether declaration of the LSS is likely to impede Telstra's incentives to invest in replacement technologies as part of the CAN. The ACCC notes that the LSS has been a declared service for an extended period of time. There is no information to suggest that Telstra has been unwilling to invest in upgrades to its CAN infrastructure as a result of this declaration. Similarly, the ACCC does not consider that declaration of the LSS would dampen incentives for network upgrades.

To the extent that declaration of the LSS promotes competition in downstream markets, this is likely to provide the impetus for dynamic efficiency gains through technological innovation and investment in the underlying infrastructures used to provide broadband and voice services. There has been increased interest and developments in new technologies such as wireless broadband and fibre networks, which are increasingly capable of offering an array of more advanced services to retail customers without needing access to the PSTN or traditional fixed network. For Telstra, it can be argued that competition has driven it to respond by deploying ADSL2+ DSLAM infrastructure in selected exchanges. The investment in infrastructure by both Telstra and its competitors also leads to increased allocative and dynamic efficiency, as consumers' demand for broadband services and voice services can be met through a variety of suppliers, with innovative, differentiated products and prices. The ACCC considers that this competition and further investment is unlikely to have taken place in the absence of competition that has been facilitated by declaration of the LSS (and ULLS). In the absence of declaration of the LSS, the ability of access seekers to provide a range of high bandwidth services that are

differentiated from those supplied via Telstra's wholesale services, or to acquire it on reasonable terms and conditions, is likely to be inhibited.

Legitimate commercial interests of the access provider supplying LSS

The TPA requires the ACCC to consider the legitimate interests of potential access providers.¹³³ This includes an access provider's ability to exploit economies of scale and scope. In this context, the relevant consideration for the ACCC is whether mandated access to the LSS can be provided while maintaining the legitimate commercial interests of Telstra (and other potential providers). Where it is found that this is not possible, declaration is likely to have an adverse impact on incentives for economically efficient investment in infrastructure.

The consideration of the legitimate commercial interests of access providers in this context is closely related or influenced by the price and non-price terms upon which access is granted.

In relation to *price terms*, the legitimate commercial interests of an access provider supplying the LSS would extend to the ability of carriers to make a normal economic return on an investment, taking into account commensurate risk and returns that would be expected in a competitive market.

In relation to *non-price terms*, the ACCC views this criterion as requiring an assessment of the broader commercial interests of the access provider in conducting its own business affairs. An access provider, as an owner or controller of particular facilities, should not, simply because it is under an obligation to provide access to its service, be unduly compromised in the conduct of its own legitimate business interests.

The ACCC has no evidence to suggest that declaration would compromise Telstra's legitimate commercial interests as supplier of the LSS.

¹³³ Subsection 152AB(6)(b).

2.4 Conclusion on whether declaration of the LSS will promote the Long Term Interests of End-users

On the analysis in sections 2.1 to 2.3 above, the ACCC has found that declaration will likely promote the LTIE. The reasons for the ACCC's final decision are summarised below.

Promotion of competition

The ACCC is of the view that the LSS is an important input for the promotion of competition in the provision of downstream high-bandwidth carriage services. By allowing access to the high frequency portion of an unconditioned local loop, the LSS enables access seekers to compete over all downstream stages of the production process in the provision of high-speed broadband services.

The ACCC notes that there are alternative wholesale/access services to the LSS for providing retail broadband services available in various geographic areas of Australia. However, these supply options do not currently provide an effective substitute for the LSS in terms of underlying functionality and/or geographic coverage. Therefore, the ACCC considers that reliance on these alternatives would limit an access seeker's ability to effectively compete across product-price-service package dimensions of broadband supply, compared to use of the LSS. In practice, innovation and consumer choice in the supply of high speed broadband services has been driven by access seekers, such as internet service providers, using the LSS to deliver ADSL 2+ services to end-users.

The ACCC considers that the current structure of the market for the LSS confers significant and ongoing market power upon Telstra in the negotiation of terms and conditions for supply of the service. Under these conditions, it is unlikely that Telstra's commercially agreed prices for the LSS would be consistent with the LTIE, absent the declaration.

The ACCC considers that declaration of a LSS is likely to promote and preserve competition in the high bandwidth carriage services market as this would lead to the eligible service being more likely to be provided on competitive terms and conditions. In turn, the ACCC believes this would lead to the promotion of the LTIE by ensuring access seekers are better able to compete with Telstra in downstream markets. This should generate lower prices for end-users and a greater range of better quality service offerings.

Declaration of the LSS may also assist in promoting competition in the downstream markets for fixed voice services by enabling access seekers to offer VoIP services to end-users. However, the ACCC recognises that VoIP services are unlikely to represent a viable or widespread substitute to PSTN voice services at this time.

The above analysis indicates that declaration of the LSS will likely promote competition and the LTIE.

The ACCC recognises that communications markets are rapidly evolving and there are a number of potential developments that may increase the competitive constraints on Telstra as the sole LSS access provider. The ACCC is also mindful of the on-going

need for robust empirical information as an input into its assessment of competition. In this regard, the ACCC, in March 2007, initiated a process under which it will collect (and regularly update) information regarding the nature and location of competing infrastructure in geographic areas of Australia.¹³⁴ This information is intended to assist the ACCC in future considerations of Part XIC matters, including its proposed holistic review of fixed line services declarations.

Any-to-any connectivity

The ACCC believes that declaration of the LSS is consistent with the achievement of any-to-any connectivity.

Efficient investment in and use of infrastructure

The ACCC considers that declaration will likely encourage efficient investment in infrastructure used to provide the LSS and efficient use of infrastructure used to provide services in downstream markets.

Absent declaration, the ACCC has found that Telstra is likely to face little competitive constraint in setting prices at levels consistent with those expected in a competitive market. As a result, Telstra is less likely to face the correct incentives to price its services in ways which promote the efficient use of infrastructure. Declaration in such a situation should ensure access prices better reflect costs, thus providing appropriate signals for access seekers' build/buy decisions and more efficient investment in infrastructure.

Declaration of the LSS is also likely to encourage efficient investment in infrastructure used to supply broadband services. The ACCC considers that, absent declaration, the ability of access seekers to acquire the LSS, or to acquire it on reasonable terms and conditions, would be constrained. This may also distort the incentives of access seekers to undertake efficient investment in or use of infrastructure. The ACCC considers that Telstra's incentives to efficiently invest in replacement technologies to deliver broadband services should not be unduly affected by the declaration of the LSS.

¹³⁴ ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

2.5 Conclusion on whether to continue, vary or revoke the LSS Declaration

Under s.152ALA(7) of the TPA, the ACCC must decide what action to take in relation to the existing declaration. Specifically, the ACCC is required to hold a public inquiry about whether to:

- extend or further extend the expiry date of the declaration;
- revoke the declaration;
- vary the declaration;
- allow the declaration to expire without making a new declaration; or
- allow the declaration to expire and then make a new declaration.

Therefore the ACCC can extend, re-declare, vary or revoke a declaration, or allow a declaration to expire (without a new declaration being made). Given the ACCC is satisfied that declaration of the LSS would be in the LTIE, the options available to the ACCC are to extend the expiry date of the existing declaration; allow the declaration to expire and then make a new declaration; or vary the declaration.

Submissions from interested parties to the Discussion Paper and Draft Decision do not specifically comment on the issue of whether the ACCC should extend the expiry date of the declaration or allow the declaration to expire and then make a new declaration. While the majority of submissions assert that the LSS should be “re-declared”, there is no suggestion that the ACCC should let the current declaration expire before making a new declaration. Only Telstra argues that, if the LSS is declared, the declaration should be varied to exclude certain geographic areas. This issue is considered below.

In response to the Draft Decision, AAPT, Agile, Adam Internet, CCC, CTN and Network Technology agree with the Commission’s Draft Decision to extend the LSS declaration on a national basis until 31 July 2009.

Network Technology further states removing regulation from the limited areas where there is facilities based competition via wireless or cable networks is likely to result in access seekers being pushed out of the market.¹³⁵

Telstra states that it is “extremely disappointed” that the Commission is extending the LSS declaration.

Telstra’s submissions largely focus on issues of legal interpretation and obligations concerning the manner in which the ACCC has reached its Draft Decision. Telstra asserts that:¹³⁶

¹³⁵ Network Technology submission to the Draft Decision, op cit, p. 4.

- the ACCC has not properly balanced the LTIE objectives, but rather has sought to “cherry pick” short term detrimental impacts of non-declaration while ignoring the LTIE.
- the ACCC has not “positively satisfied itself that extending the LSS declaration would be in the LTIE”, and
- the ACCC has applied the LTIE criteria incorrectly. Telstra state that the ACCC has taken a ‘defensive stance’ by assuming the starting point for the review is from the “default position that the LSS declaration is *already* in the LTIE (and hence removing the declaration now would not be)”.

Telstra also submits that access seekers reflect a desire to maintain the LSS declaration because it provides them with a ‘real option’ at no cost. In this regard, Telstra, with reference to the theory of Professor Martin Cave, asserts that the LSS is a stepping stone toward the ULLS.¹³⁷ Telstra also notes that the ACCC should not be confusing the issue of the ‘real option’ with the lack of effective substitutability.¹³⁸

Variation of the declaration

The ACCC notes Telstra’s proposal that, if the LSS is re-declared, CBD areas should be excluded from re-declaration due to the presence of alternative infrastructure and the level of competition in these geographic areas. In support of this view, Telstra asserts that the rationale underlying the ACCC decision to exclude CBD areas from the re-declaration of the LCS and the declaration of WLR in July 2006 should apply to the case of the LSS. Telstra states that the level of competing infrastructure in these areas has increased since the ACCC’s decision in 2002 and the provision of data services, not local telephony, has been the key driver of infrastructure deployment.¹³⁹

As a general principle, the ACCC agrees that regulation should be wound back where it is unnecessary and where the market is delivering effective, sustainable competitive outcomes. As noted above, the ACCC is mindful that the development of full-facilities and quasi-infrastructure competition is occurring unevenly across geographic regions of Australia and regulatory setting may need to be adjusted accordingly. Therefore, in order to properly examine this issue, the ACCC initiated a process in March 2007 under which it will collect (and regularly update) information regarding the nature and location of competing infrastructure.¹⁴⁰

¹³⁶ Telstra submission to the Draft Decision, op cit, pp. 10-11 and Telstra, Telstra supplementary submission to the Draft Decision, op cit, p. 1.

¹³⁷ Telstra supplementary submission to the Draft Decision, op cit, p. 3.

¹³⁸ *ibid*, p. 3. For the reasons described above, the ACCC is of the view that the LSS and ULLS are not functional substitutes at this time. Rather, these two services represent inputs into quasi-facilities-based competition for different downstream markets. This factor, in combination with the fact that both services involve infrastructure deployment by access seekers, suggests that the characterisation of the LSS as a stepping stone for ULLS may not be appropriate.

¹³⁹ Telstra submission to the Discussion Paper, op cit, pp. 51-53.

¹⁴⁰ ACCC, *Proposed audit of telecommunications infrastructure assets—discussion paper*, March 2007.

In response to the Draft Decision, Telstra asserts that the ACCC's decision to re-declare the LSS on a national basis because of restricted evidence is not positively satisfying itself that declaration on a national basis is in the LTIE.¹⁴¹

Telstra states that:

“...the Commission cannot simply re-declare on the basis that there is insufficient evidence that declaration is no longer required... it must consider whether there is sufficient evidence that the declaration is required.”¹⁴²

The ACCC's competition analysis above acknowledges that there are alternative wholesale/access services to the LSS for providing retail high-speed broadband services in various geographic areas of Australia, including CBD areas. However, the ACCC's analysis indicates that even in those areas where most infrastructure investment has occurred, the majority of these supply options (ULLS, USS, wholesale ADSL, fixed and mobile wireless broadband) do not currently provide an effective substitute for the LSS in terms of underlying functionality. Therefore, the ACCC considers that reliance solely on these alternatives, in CBD and other geographic areas, would limit competitors' ability to effectively compete across product-price-service package dimensions of broadband supply, compared to the situation where the LSS is available. Optus' HFC network may provide the closest functional substitute to the LSS in areas of geographic overlap, such as the CBD areas of Melbourne, Sydney and Brisbane. However, the ACCC does not consider that the presence of only one other vertically-integrated competing network would necessarily be sufficient to ensure effective competition in downstream market for high-speed broadband services in these geographic areas. Furthermore, while there may be other forms of competing infrastructure, such as fibre optic loops, in various CBD areas of Australia, the ACCC does not consider that these alternatives provide a strong competitive constraint on Telstra as the sole supplier of the LSS in CBD areas. In the ACCC's 2005 survey of telecommunications infrastructure in Australia, the ACCC found that, despite the presence of 13 carriers with different types of local access networks in metropolitan and CBD areas of Melbourne and Sydney, Telstra and Optus had approximately 99 per cent of subscriber connections in these areas.¹⁴³

On balance, based on all the material presently before it, the ACCC considers that declaration of the LSS in CBD areas, as well as elsewhere, is likely to promote the LTIE.

If the ACCC were to obtain further evidence to suggest that there is effective facilities-based competition in certain geographic areas, it could consider variation of the declaration. As noted above, the ACCC is in the process of actively seeking information regarding the type and location of competing infrastructure from industry. This information will form an important input into the ACCC's proposed holistic review of fixed line services declaration in 2008.

Therefore, the ACCC does not intend to make any substantive variation to the declaration. However, the ACCC has been alerted to a minor typographical error in

¹⁴¹ Telstra submission to the Draft Decision, op cit, pp. 10-11 and Telstra supplementary submission to the Draft Decision, op cit, p. 1.

¹⁴² Telstra supplementary submission to the Draft Decision, op cit, p. 1.

¹⁴³ ACCC, *Telecommunications Infrastructure in Australia 2004*, June 2005, p.14.

the existing service description in relation to the definition of the boundary of a telecommunications network. In this regard, the ACCC has decided to vary the declaration so that it contains the correct reference to the *Telecommunications Act 1997*.

Extension of the declaration

Given the ACCC's view that declaration of the LSS on a national basis would be in the LTIE, the ACCC considers that it would not be appropriate to allow the declaration to expire. Such a course may lead to uncertainty, including as to the consequences for access negotiations and dispute notifications that may be unresolved at the date of expiry. Therefore, the ACCC's final decision is to extend the expiry date of the current LSS declaration until 31 July 2009. The declaration of the LSS would be reviewed as part of the ACCC's proposed holistic review of fixed line services declarations commencing in mid 2008.

3. Pricing principles

Section 152AQA of the TPA requires the ACCC to determine “principles relating to the price of access” for declared services. The pricing principles may also “contain price-related terms and conditions”. This means that the ACCC can specify indicative prices for the declared service.¹⁴⁴

The ACCC noted in its 2002 LSS declaration decision that the price charged for a service has a significant impact on the promotion of competition and the encouragement of incentives for efficient investment in and use of infrastructure. Declaration of a service of itself will not necessarily promote the LTIE if the price charged by an access provider is inappropriate. Accordingly the ACCC considers that the pricing principles (and, when issued, indicative prices) are an important aspect of a declaration decision. Indicative prices, in particular, can provide valuable certainty to industry about the appropriate level of charges for a service.

This chapter sets out the ACCC’s final views on pricing principles and indicative prices for the LSS. As required by section 152AQA(4) of the Act, the ACCC published draft LSS pricing principles and indicative prices in August 2007 along with the draft declaration decision.

The ACCC’s Draft Decision considered that there were outstanding issues concerning the possible allocation of a contribution to line costs and that it might be necessary to consult on indicative prices a second time were useful information forthcoming. Following the submissions from interested parties in response to the Draft Decision, the ACCC is of the view that it should not include a contribution to line costs. Accordingly it does not consider that there is a need to consult on indicative prices again and is finalising the pricing principles.

Relevant legislative matters

As noted above, an important consideration in ensuring that access to a declared service is in the LTIE is whether the terms and conditions of access are reasonable. Typically, the most contentious term of access is the price at which the declared service is provided. Other terms such as network modernisation provisions can also be contentious.

The ACCC typically assesses the price for a declared service when assessing an undertaking or arbitrating an access dispute. In assessing an undertaking, the ACCC must only accept the undertaking if, among other things, it is satisfied that the terms and conditions of the undertaking are reasonable. In determining whether terms and conditions are reasonable, the ACCC must have regard to the following matters:

- whether the terms and conditions promote the long-term interests of end-users which, as discussed already in this report, requires consideration of:
 - the objective of promoting competition;

¹⁴⁴ In *Vodafone Australia Ltd v ACCC* [2005] FCA 1294 (16 September 2005), the Federal Court held that pricing principles may specify a price.

- the objective of any-to-any connectivity;
- the objective of encouraging the economically efficient use of, and the economically efficient investment in, infrastructure;
- the legitimate business interests of the access provider;
- the interests of access seekers;
- the direct costs of providing access to the declared service;
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, telecommunications network or facility; and
- the economically efficient operation of a carriage service, telecommunications network or facility.¹⁴⁵

The ACCC may also have regard to other matters.¹⁴⁶

Similarly, when the ACCC is making a final determination in an access dispute, the ACCC must have regard to the same matters, as well as the value to a party of extensions or enhancement of capability whose cost is borne by someone else.¹⁴⁷

Accordingly, the ACCC considers that, when it is making pricing principles for a declared service, it is appropriate to have regard to the matters set out above. A more detailed discussion of these legislative criteria and their application in determining access pricing principles can be found in the ACCC's *Access Pricing Principles – Telecommunications – a guide*.¹⁴⁸

2002 pricing principles

The August 2002 final decision to declare the LSS set out the ACCC's pricing principles for the LSS.¹⁴⁹ The notable conclusions in those principles were:

- a TSLRIC pricing methodology was most appropriate for pricing the LSS;
- some form of incremental specific cost of providing the LSS—essentially the capital expenditure and operating and maintenance costs of IT systems for ordering and provisioning LSS, and operating costs associated with LSS product management and front-of-house operations—should be included in the price for the LSS;
- while there may be efficiency gains from including an allocation of line costs in the LSS price, it would be inappropriate to include such an allocation where the access provider is already recovering its line costs from other revenue sources;

¹⁴⁵ TPA, section 152AH(1).

¹⁴⁶ *ibid*, section 152AH(2).

¹⁴⁷ *ibid*, section 152CR.

¹⁴⁸ ACCC, *Access pricing principles – Telecommunications – a guide*, July 1997.

¹⁴⁹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 78.

- if an allocation of the cost of a line was included in LSS charges, the allocated component should be geographically de-averaged.

The ACCC concluded that it believed Telstra already fully recovered its line rental costs through a range of revenue sources. Accordingly, the ACCC concluded that the price of the LSS should be set to recover the incremental specific costs of providing the LSS only.

The 2002 pricing principles did not contain indicative prices for the LSS. However discussion in the report indicated that the ACCC believed a competitive price for a LSS might be as low as \$2.50 per month.¹⁵⁰

Events since the 2002 pricing principles

Since the 2002 pricing principles, a number of events have occurred that are relevant to the future pricing of the LSS.

Rebalancing of line rental charges

Firstly, the ACCC notes that a significant issue at the time of the 2002 pricing principles was whether Telstra fully recovered its line-related costs from revenue sources other than the LSS charge. As the ACCC has noted in other contexts, Telstra has been able to undertake significant ‘rebalancing’ of its PSTN line rental and call costs since 2000 – that is, it has increased its line rental charges so as to better recover line costs from line rental revenues rather than call revenues.¹⁵¹ This may have implications for consideration of whether to include a line cost component in the LSS charge.

The ACCC considers further below whether Telstra is recovering its line-related costs in its existing charges for services other than the LSS.

Undertakings

Following the declaration of the LSS in August 2002, Telstra has twice submitted sets of undertakings about the price of the LSS.

In September 2003, Telstra submitted an LSS undertaking proposing a \$15 monthly price for the LSS. Following public consultation, the ACCC rejected the undertaking in August 2004.¹⁵²

Telstra then submitted two sets of LSS undertakings in December 2004. The December 2004 monthly charge undertakings proposed a LSS monthly charge of \$9 per month. The December 2004 connection and disconnection charge undertakings proposed a LSS connection charge of \$90 and a LSS disconnection charge of \$90. Following its public consultation, the ACCC rejected the monthly charge

¹⁵⁰ *ibid.*, pp. ii-iii.

¹⁵¹ ACCC, *Access dispute between Chime and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 19 Jan 07, p. 9, available at <http://www.accc.gov.au/content/index.phtml?itemId=712456>

¹⁵² ACCC, *A final report on the assessment of Telstra’s undertaking for the Line Sharing Service*, August 2004.

undertakings in December 2005 and the connection and disconnection charge undertaking in April 2006.¹⁵³

A significant factor in the ACCC's decision to reject the monthly charge undertakings in December 2005 was the ACCC's view that, under the statutory criteria in the TPA, Telstra's proposed method of recovering the incremental cost categories that it incurs when supplying the LSS was not reasonable. The ACCC instead considered that Telstra incurs these cost categories when supplying the LSS and the ULLS to access seekers, or supplying line-sharing to itself in order to on-supply PSTN and ADSL services on the same line. Further, the ACCC considered that 'LSS-specific costs' should be combined with 'ULLS-specific costs' and 'Telstra's internal equivalent costs for ADSL', and then allocated across a broader range of services.¹⁵⁴ Telstra appealed the ACCC's decision to the Australian Competition Tribunal.

Tribunal decisions on allocation of specific costs

In June 2006, the Tribunal upheld the ACCC's decision to reject the LSS monthly charge undertakings.¹⁵⁵ In particular, the Tribunal considered that the allocation of 'LSS-specific' costs to LSS services alone would not be reasonable, and that any allocation method "should allocate costs at least over active DSL lines".¹⁵⁶ The Tribunal accordingly considered that it could not be satisfied that the terms and conditions of the undertaking were reasonable.

In May 2007, the Tribunal also considered the allocation of specific costs in the context of assessing a Telstra ULLS monthly charge undertaking.¹⁵⁷ The same cost categories comprise the 'ULLS specific costs' as 'LSS-specific costs'. In the course of that decision, the Tribunal relevantly found that it was "not satisfied that Telstra's allocation of its 'ULLS specific costs' across ULLS accessed [sic] or forecast accessed [sic] lines only is reasonable".¹⁵⁸

Determinations made by the ACCC over late 2006 and 2007

As noted in the ACCC's discussion paper, on 19 January 2007, the ACCC issued reasons supporting interim determinations made in December 2006 for two LSS access disputes.¹⁵⁹ Those interim determinations set a monthly charge of \$3.20 per LSS. The reasons set out Telstra's proposal to include some line-related costs in the LSS charge. While the ACCC considered that Telstra's willingness to reconsider its approach to the recovery of line rental costs was welcome, Telstra's particular

¹⁵³ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision*, December 2005; ACCC, *Assessment of Telstra's LSS undertaking relating to connection and disconnection charges—final decision*, April 2006.

¹⁵⁴ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision*, December 2005. pp. 39-41, 45-62.

¹⁵⁵ Australian Competition Tribunal, *Telstra Corporation Limited (ACN 051 755 556)*, [2006] ACompT 4.

¹⁵⁶ *ibid*, at [161].

¹⁵⁷ Australian Competition Tribunal, *Telstra Corporation Limited (No 3)* [2007] ACompT 3.

¹⁵⁸ *ibid*, at [411].

¹⁵⁹ The reasons are available at available at <http://www.accc.gov.au/content/index.phtml?itemId=712456>

proposal was not acceptable. The reasons for this were set out in the reasons and were also summarised in the ACCC's discussion paper for the LSS declaration.¹⁶⁰

The ACCC's interim determinations also set connection and disconnection charges for the LSS. The determination specified a \$63 single connection charge for the LSS, and a \$1500 managed network migration connection charge for 50 LSS.¹⁶¹ The interim determinations also specified a \$58 disconnection charge for the LSS that was only to be incurred in limited situations.¹⁶²

The ACCC has subsequently made final determinations in three LSS access disputes between Chime and Telstra, Primus and Telstra and Request and Telstra. The Chime and Request final determinations set a monthly charge of \$2.50 per LSS, which more fully gave effect to the Tribunal's views on the allocation of specific costs.¹⁶³ The ACCC decided not to include line-related costs in the LSS monthly charge.

The determinations also set LSS connection charges. The Request and Primus final determinations set a LSS single connection charge of \$40.90 per connection. They also set a LSS single disconnection charge of \$36.70 per disconnection that is only payable in certain circumstances. All three determinations also set managed network migration charges for the LSS, based on (for 2007-08) a fixed charge per migration of \$134.50 and a variable charge of \$30.90 per connection made as part of the migration. A minimum charge of \$752.50 per migration was specified, and disconnection charges were not to be incurred as part of a migration.

The ACCC continues to arbitrate a further six LSS access disputes between various access seekers and Telstra.¹⁶⁴

Consultation on line costs

As noted above, the ACCC consulted on the issue of an inclusion of an allocation of line costs at the time of the 2002 declaration decision and decided against the inclusion of such an allocation.¹⁶⁵

Telstra proposed in the context of arbitrations to reconsider its recovery of line costs. In October 2006, following the issue of a draft interim determination, Telstra raised the issue of recovery of its line costs. The ACCC decided not to allow for recovery of line costs in setting the interim determination prices in December 2006.

¹⁶⁰ ACCC, *Fixed services review - a second position paper*, April 2007, p. 69.

¹⁶¹ ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 23 Feb 07, p. 1, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

¹⁶² *ibid*, p. 2.

¹⁶³ See, e.g. ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>. The Request and Primus final determinations are available at the same page. A list of determinations is available on the ACCC's Determinations register at <http://www.accc.gov.au/content/index.phtml?itemId=768625>

¹⁶⁴ A list of current access disputes is available on the ACCC's website at: <http://www.accc.gov.au/content/index.phtml/itemId/635059>

¹⁶⁵ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 78.

However, the ACCC strongly encouraged parties at that time to take the opportunity to engage in meaningful negotiations around the issue of line cost rebalancing. It asked parties to report on the outcomes by 21 January 2007.¹⁶⁶ The parties did not reach a negotiated outcome. The ACCC also sought views from parties on line cost rebalancing in consulting on final determinations.¹⁶⁷

In addition to the consideration in arbitration processes, the ACCC also sought views from industry generally on rebalancing of line costs between PSTN services and the LSS in its discussion paper for the present declaration review.¹⁶⁸ It then specifically sought submissions on the same issue in its draft decision.¹⁶⁹

3.1 Appropriate pricing principles

Possible pricing principles

A fundamental question in considering the pricing of a declared service is the general type of pricing principle to apply. The ACCC's access pricing principles for telecommunications guide concluded that a cost-based pricing approach (typically the ACCC uses the total service long-run incremental cost (TSLRIC) methodology) would usually be the most appropriate methodology for determining access prices.¹⁷⁰ However the ACCC has employed other pricing approaches, such as benchmarking or retail minus retail cost (RMRC), for pricing telecommunications services. Other options include the use of historic or current cost accounting information.

In the August 2002 pricing principles, the ACCC considered that TSLRIC would be the most appropriate pricing principle for the LSS.¹⁷¹ Submissions to that review were generally in favour of a TSLRIC pricing principle.

The TSLRIC approach can be best considered by breaking the concept into components:

- 'Total service' refers to the cost of production of an entire service, not to the cost of a particular unit. However, the cost is usually expressed on a per-unit basis by dividing by the number of units supplied.
- "Long run" means that the concept refers to a period where all factors of production can be varied, as opposed to the short run, where the amount of at least one factor of production is fixed.
- "Incremental cost" means that the concept refers to the additional costs of supplying the service over and above the situation where the service was not

¹⁶⁶ ACCC, *Access dispute between Chime and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 19 Jan 07, p. 9, available at <http://www.accc.gov.au/content/index.phtml?itemId=712456>

¹⁶⁷ ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, p. 25-30, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>.

¹⁶⁸ ACCC, *Fixed services review - a second position paper*, April 2007, p. 70.

¹⁶⁹ ACCC, *Review of the Line sharing service declaration—draft decision*, August 2007, p. 81.

¹⁷⁰ ACCC, *Access pricing principles – Telecommunications – a guide*, July 1997.

¹⁷¹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 83.

supplied, assuming the scale of all other production activities remained unchanged. Strictly speaking, the concept refers to only those costs that can be attributed to the production of the service. In practice, the strict TSLRIC concept is often expanded to include a contribution for indirect and overhead costs (TSLRIC+).

The RMRC approach has been used by the ACCC to price the local carriage service and wholesale line rental service. The approach takes the retail prices paid for the declared service and deducts the avoidable costs of retailing the service to end-users to calculate an access price. However it is necessary for there to be a readily referable retail service equivalent to the declared service to apply this principle. For a service such as LSS, where the retail service can vary quite significantly, this approach may not be appropriate.

Historic cost or current cost accounting information approaches take the costs for a service allocated in accounting documentation, possibly with adjustments, to estimate the cost of the declared service. The ACCC has not used these pricing approaches to price any declared services. A lack of reliable accounting data, and the risk of including unrelated costs in the cost base, can be a significant barrier to using these approaches. This is particularly true for the LSS, which is not one of the services in the ACCC's Regulatory accounting framework.¹⁷² Furthermore, unadjusted accounting data will not reflect possible productivity improvements that will be achievable in the future. This may be a particular issue for pricing of telecommunications services, where rapid technological change can drive productivity gains.

Submissions

Submissions in response to the ACCC's discussion paper do not consider the issue of the fundamental underlying principle in any depth. Most submissions appear to take a TSLRIC+ (or, at the least, cost-based) pricing principle as a given. Similarly, submissions in response to the Draft Decision did not consider the underlying pricing principle in any significant way.

ACCC's view

The ACCC has historically been of the view that a TSLRIC+ approach is consistent with the price that would prevail if an access provider faced effective competition, and that it usually best promotes the long-term interests of end-users.¹⁷³

Further, the ACCC has historically been of the view that a TSLRIC+ pricing approach is consistent with the legislative matters outlined above.¹⁷⁴

In the absence of any submissions to the contrary, the ACCC considers that its historic views about the use of TSLRIC+ remain applicable to the LSS.

¹⁷² ACCC, *Telecommunications industry regulatory accounting framework (Record-keeping rules)*, October 2003, p. 55-56.

¹⁷³ ACCC, *Access pricing principles – Telecommunications – a guide*, July 1997, p. 29.

¹⁷⁴ *ibid*, pp. 29-31.

The Australian Competition Tribunal has also expressed its general agreement with the TSLRIC+ pricing methodology and the approach taken by the ACCC. The Tribunal has stated in the context of a review of anticipatory exemption orders that:¹⁷⁵

In our view, there are some basic pricing principles that should be observed in applying the LTIE test. In considering these principles, we are in general agreement with the approach established by the Commission in its guide to Access Pricing Principles – Telecommunications (as published in July 1997).

This version of cost-based pricing is known as ‘total service long run incremental cost’ (“TSLRIC”). It includes operating and maintenance costs, a normal commercial return (moderated by the risk involved) and a contribution to common costs. In our view, in the general case where access prices need to be regulated, unless pricing is on a TSLRIC basis, efficient investment is unlikely to be encouraged. This, in turn, would fail to promote competition in the long-term, as end-users would not be able to benefit from new investment (thereby also missing out on more efficient and diverse product offerings).

The Tribunal went on to state that:¹⁷⁶

This discussion should not be taken to suggest that TSLRIC pricing should be imposed at every opportunity. It will often be the case that regulation, including regulated pricing, is not appropriate in given circumstances. It does mean, however, that, in our view, it would generally not be in the LTIE to depart from TSLRIC pricing where access is regulated. Accordingly, where an access regime requires, or creates an unacceptable risk, of non-TSLRIC pricing, the Tribunal considers that such a regime is unlikely to encourage the efficient use of, and investment in, infrastructure.

As noted above, the issue of which fundamental pricing principle to use did not seem to be a concern for interested parties responding to the ACCC’s discussion paper. Rather, parties appeared to assume that a cost-based approach would continue if the LSS declaration was continued, and instead concentrated on particular issues such as the inclusion of line costs.

Given the ACCC’s previous views, the Tribunal’s guidance and the absence of any submissions to the contrary, the ACCC’s final position is to continue to apply a TSLRIC+ pricing principle to the LSS. The ACCC considers that a TSLRIC+ pricing principle best satisfies the regulatory criteria.

Cost components

The choice of pricing principle is only the first step in considering the pricing of a declared service such as the LSS. The particular costs to be included in the price for the declared service are also a significant issue. In the case of the LSS, it is necessary to consider both monthly charges and connection/disconnection charges.

There are two cost components involved in the monthly provision of a LSS. These are:

- the specific costs of providing a LSS; and
- some allocation of the cost of a line over which a LSS is provided.

¹⁷⁵ Australian Competition Tribunal, *Seven Network Limited (No 4)* [2004] ACompT 11 at [135] to [136].

¹⁷⁶ *ibid.*, at [137].

The inclusion of a cost component for the specific costs of providing a LSS is relatively non-controversial, although the measurement and appropriate recovery of the costs has been the subject of significant debate. The inclusion of some allocation of the cost of a line has been a controversial issue.

In this context, it should be noted again that a LSS is provided over the high frequency part of a copper line and an underlying voice band PSTN service operates on the low frequency part of the line over which an LSS is provided. Existing pricing structures for the LSS have only included a charge for the specific costs of providing a LSS, and have not included an allocation of the cost of the line over which the LSS is provided.

Relevantly, a charge for the specific cost of providing the LSS is a payment from access seekers to Telstra for the use of the high frequency part of the line only. This charge has been set by the ACCC at \$2.50 in recent LSS final determinations.¹⁷⁷ However, in all cases Telstra also recovers money from the underlying voice band PSTN service. If the underlying voice service is provided at the retail level by another carrier, Telstra will receive wholesale line rental costs and wholesale call costs such as payments for the local carriage service. The ACCC's current indicative price for monthly wholesale line rental charges is \$23.12 (excl. GST) for residential users. Alternatively, if Telstra is the retail provider of the underlying voice service, it will receive retail line rental charges and call costs. The line rental charge for Telstra's most popular residential plan, HomeLine Plus, is \$27.23 (excl. GST). Accordingly, Telstra receives significantly more revenue from a LSS line than simply the LSS charge for specific cost component. This issue is discussed further below.

The connection charges and disconnection charges for the LSS relate to the costs of technicians performing jumpering work inside Telstra exchanges, travel and vehicle costs for the technicians, back-of-house costs and materials costs.

Specific costs

The specific costs of providing the LSS are the costs incurred by Telstra to allow for supply of the declared LSS. The costs typically claimed by Telstra are:

- IT system development and operational costs;
- connection group costs;
- wholesale product management costs; and
- indirect costs.

It is important to consider that an access provider can use copper loops itself, or can provide access for another service provider to use them. Further, copper loops can be used to provide a single service (typically a voice service), or can be 'shared' so as to provide a combination of voice and broadband services.

¹⁷⁷ See, e.g., ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, June 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

An access provider will face the above categories of cost when:

- (i) supplying the LSS or the ULLS to another service provider; or
- (ii) when providing line sharing to itself – that is, when it uses a copper loop to supply both voice and data services (either retail or wholesale) on the line.

Accordingly, Telstra also incurs equivalent specific costs to allow for the supply of the declared ULLS, or when supplying line sharing to itself to provide ADSL services over the line.

Telstra has previously provided detailed documentation and models about the amount of costs it incurs in providing the LSS.¹⁷⁸ The ACCC has noted in the past that the amount of specific costs claimed by Telstra may be overstated.¹⁷⁹

However, an issue that has been more controversial and has a significant bearing on the level of LSS monthly charges is the method of recovery of the specific costs and the range of services over which the specific costs should be recovered.

As noted above, the ACCC is of the view that ‘LSS-specific costs’ should not, under the statutory criteria, be allocated to LSS lines alone. Rather, the ACCC is of the view that ‘LSS-specific costs’ should be combined with ‘ULLS-specific costs’ and Telstra’s internal equivalent costs for ADSL, and then allocated across a broader range of services.¹⁸⁰ In other words, *all* equivalent costs should be measured and allocated across a broader demand base. The ACCC’s position on, and analysis of, ‘LSS-specific costs’ is consistent with its position on, and analysis of, ‘ULLS-specific costs’.

It is important to note that, under the ACCC’s preferred approach, the costs to pool and allocate are limited to the like-for-like or equivalent incremental costs associated with:

- a Telstra internal request for line sharing when a retail or wholesale ADSL service is requested; or
- a request for line sharing, or access to the full spectrum on the line, from an external service provider (LSS or ULLS);

Costs associated with the conversion of internal line sharing or external line access into a downstream service are not included in the cost pool to be allocated.

¹⁷⁸ e.g. Telstra, *Telstra’s submission in support of its undertaking dated 1 September 2003*, undated; Telstra, *Telstra’s submission in support of the SSS monthly charge undertaking dated 13 December 2004*, March 2005.

¹⁷⁹ ACCC, *Assessment of Telstra’s ULLS and LSS monthly charge undertakings - final decision*, December 2005, pp. 57-62. The discussion deals with both ULLS and LSS specific costs.

¹⁸⁰ ACCC, *Assessment of Telstra’s ULLS and LSS monthly charge undertakings - final decision*, December 2005, pp. 39-41, 45-62; ACCC, *Assessment of Telstra’s ULLS monthly charge undertaking - final decision*, August 2006, p. 132-160.

Contrary to the ACCC's position, Telstra has conversely contended that 'LSS-specific costs' should be recovered from LSS lines alone (and similarly contended that 'ULLS-specific costs' should be recovered from ULLS lines alone).¹⁸¹

As discussed above, the inclusion of a specific cost component in the LSS charge is a charge for the use of the high frequency part of the line. In all cases, Telstra also receives payments for the line rental and call charges for the underlying voice band PSTN service that is supplied on all lines on which a LSS is also provided. These charges could be either wholesale or retail payments.

Submissions

Telstra's submission to both the ACCC's Discussion Paper and Draft Decision reiterates its position that 'LSS-specific costs' should be recovered from LSS users only.¹⁸² Other interested parties do not make any significant submissions on the appropriate approach to recovering specific costs, although AAPT and Agile express support for a broader recovery base in their submissions in response to the ACCC's Draft Decision.¹⁸³

ACCC's view

The ACCC's most recent public assessment of the approach to recovery of specific costs was contained in its August 2006 decision on the recovery of ULLS specific costs. In that assessment, the ACCC considered the merits of Telstra's approach to the recovery of specific costs against the statutory reasonableness matters listed above. Significant ACCC conclusions were that:

- a broader cost recovery basis "leads to an outcome which more closely approaches a competitive outcome" and better leads to competitive neutrality than Telstra's narrower approach;¹⁸⁴
- a broader cost recovery basis will give Telstra stronger incentives to invest in efficient technology and will better promote efficient access seeker investment in alternative infrastructure, compared to Telstra's narrower approach;¹⁸⁵
- Telstra's legitimate business interests will be met under either approach, but Telstra's narrower approach will go beyond what is needed to protect those legitimate business interests;¹⁸⁶

¹⁸¹ Telstra, *Telstra's response to the ACCC's draft decision on Telstra's ULLS and LSS monthly charge undertakings*, 23 September 2005, pp. 11-15, 26-7; Telstra, *Public version of Telstra's confidential response to the Commission's draft decision on Telstra's ULLS monthly charges undertakings dated 23 December 2005*, 7 August 2006, pp. 37-42.

¹⁸² Telstra submission to the Discussion Paper, op cit, p. 55; Telstra to the LSS Draft Decision, op cit, p. 10.

¹⁸³ Agile submission to the Draft Decision, op cit, p. 1; AAPT/PowerTel submission to the Draft Decision, op cit, p. 3.

¹⁸⁴ ACCC, *Assessment of Telstra's ULLS monthly charge undertaking—final decision*, August 2006, p. 136.

¹⁸⁵ *ibid*, p. 139.

¹⁸⁶ *ibid*.

- a broader cost recovery basis better allows access seekers to compete for end-users on their merits, provides a more stable price and provides greater certainty, and thus better allows for the interests of access seekers than Telstra's narrower approach;¹⁸⁷
- either approach could be considered commensurate with the recovery of the direct costs of providing access to the declared service, but the fact that the costs are caused by declaration, rather than end-users alone, supports a wider cost recovery base;¹⁸⁸
- a broad recovery base for specific costs will better lead to the promotion of productive and allocative efficiency.¹⁸⁹

Accordingly, the ACCC considered that a broader recovery base better accords with the matters to which the ACCC typically has regard when considering pricing. The ACCC considers that the above considerations apply equally to the LSS, and notes that equivalent conclusions were earlier drawn in December 2005 in the ACCC's consideration of Telstra's most recent LSS monthly charges undertaking.¹⁹⁰ The ACCC applied the same principles in setting a \$2.50 monthly price in its recent final determination in a Chime-Telstra and Request-Telstra LSS access dispute.¹⁹¹

Telstra appealed both the ACCC's December 2005 decision to reject Telstra's LSS monthly charge undertaking and the ACCC's August 2006 decision to reject Telstra's ULLS monthly charge undertaking to the Australian Competition Tribunal. As noted, both those ACCC decisions took the same position on specific costs.

The Tribunal upheld the ACCC's position to reject the undertakings on both appeals, and agreed with the ACCC that the broader recovery base was the appropriate approach to specific costs. In the LSS decision, the Tribunal concluded, after assessing Telstra's proposed approach against the reasonableness matters, that:¹⁹²

As we noted in respect of the levelisation issue, it is no part of our task to decide whether one form of cost allocation is more reasonable than another form of cost allocation. Our task is to determine whether the manner in which Telstra has determined its monthly per unit costs is reasonable having regard to the statutory matters to which we have referred. We have reached the conclusion that it is not so reasonable. However, it follows from our analysis that a reasonable approach to cost allocation should go beyond allocating the costs of providing the LSS to LSS lines alone, and that any method should allocate costs at least over active DSL lines. We leave open for later consideration whether cost allocation should be over all active or potentially active DSL lines. However, we note that, at the least, the cost allocation should be over all active DSL lines.

¹⁸⁷ *ibid.*, p. 140.

¹⁸⁸ *ibid.*, p. 143.

¹⁸⁹ *ibid.*, p. 145.

¹⁹⁰ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision*, December 2005, pp. 49-57.

¹⁹¹ See, e.g., ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, June 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

¹⁹² Australian Competition Tribunal, *Telstra Corporation Ltd (ACN 051 775 556) [2006] ACompT 4* at [161].

On balance, we do not consider that allocating costs across only LSS lines is likely to give rise to a per unit cost estimate for providing the LSS (and a charge determined in reliance upon this cost estimate) that is reasonable.

Equivalently, the Tribunal made the following statement about specific costs in the context of the ULLS decision:¹⁹³

We do not accept Telstra's submission that the specific costs incurred by it in providing the ULLS should only be allocated to, and recovered from, the ULLS and should not be allocated across a broader range of services, such as all active or potentially active xDSL lines.

Given the ACCC's views on the recovery of specific costs in two previous undertaking assessments, and the Australian Competition Tribunal's endorsement of those views on two occasions, the ACCC considers that it does not accept that 'LSS-specific costs' should be recovered from LSS lines alone. Telstra's proposed approach does not accord with the relevant statutory matters that the ACCC must give consideration to. While Telstra merely states again that it opposes the ACCC's view, as endorsed by the Tribunal, on the allocation of specific costs, no submissions made to this declaration inquiry present any substantive arguments suggesting that the views of the ACCC and the Tribunal are in error.

Telstra argues that section 152CR(1)(d) of the TPA means that the ACCC cannot pool costs.¹⁹⁴ That section requires the ACCC to take account of the direct costs of the service. The ACCC has taken account of those costs in making this and previous decisions about specific costs. It considers that the appropriate way for those costs to be recovered, having regard to all the statutory criteria, is by using a broad recovery base. The ACCC notes the Tribunal's views on this point in its decision on Telstra's LSS undertaking. In that decision, the Tribunal considered that the relevant inquiry, when considering the direct costs of providing access to a declared service, is whether Telstra would be able to recover its direct costs of providing access to the LSS. The Tribunal considered in that decision that there are a number of cost allocation methods, other than the recovery of LSS specific costs solely from LSS charges, that would enable Telstra to recover its direct costs of the LSS.¹⁹⁵ The Tribunal specifically identified the Commission's use of a broad recovery base as one of those methods. The Tribunal further endorsed this view in its assessment of Telstra's ULLS undertaking.¹⁹⁶

The ACCC considers that its approach is entirely consistent with the requirements of section 152CR(1)(d) of the Act. The ACCC is satisfied that Telstra will recover its LSS specific costs under the broad recovery base approach.

Telstra has submitted in other regulatory contexts that the ACCC's approach does not allow it to exploit economies of scale and scope in the provisioning of its retail services. However, the ACCC considers that such an argument is misconceived as it fails to realise that the ACCC's approach to specific costs also drives economies of scale and scope by encouraging the uptake of DSL, LSS and ULLS services and generating efficiencies.

¹⁹³ Australian Competition Tribunal, *Telstra Corporation Ltd (No. 3)* [2007] ACompT 3 at [396].

¹⁹⁴ Telstra submission to the Draft Decision, op cit, p. 10.

¹⁹⁵ Australian Competition Tribunal, *Telstra Corporation Ltd (ACN 051 775 556)* [2006] ACompT 4 at [130].

¹⁹⁶ Australian Competition Tribunal, *Telstra Corporation Ltd (No. 3)* [2007] ACompT 3 at [400].

Accordingly, it is the ACCC's view that 'LSS-specific costs' should be combined with 'ULLS-specific costs' and 'Telstra's internal equivalent costs when providing internal line-sharing', and then allocated across the active number of ULLS, LSS and ADSL lines. The ACCC notes that, arguably, the costs could be allocated over a greater number of lines.¹⁹⁷ However it considers that using the active number of ULLS, LSS and ADSL lines is an appropriate measure. The ACCC has used this recovery base in setting the \$2.50 monthly charge in recent final determinations in Chime-Telstra and Request-Telstra LSS access disputes.¹⁹⁸

Line costs

An issue of significant debate in the pricing for the LSS has been whether the LSS monthly charge should include an allocation of the costs of the copper line over which the LSS is supplied.

A LSS is provided over the high frequency part of a copper line. Both the 2002 LSS service description and the service description for this current decision to extend the declaration require that an underlying voice band PSTN service operates on the low frequency part of the line over which an LSS is provided.

As noted above, the \$2.50 charge for the specific cost of providing the LSS is a payment from access seekers to Telstra for the use of the high frequency part of the line. However, in all cases Telstra also recovers money from the underlying voice band PSTN service. If the underlying voice service is provided at the retail level by another carrier, Telstra will receive wholesale line rental costs and wholesale call costs such as payments for the local carriage service. The ACCC's current indicative price for monthly wholesale line rental charges is \$23.12 (excl. GST) for residential users. Alternatively, if Telstra is the retail provider of the underlying voice service, it will receive retail line rental charges and call costs. The line rental charge for Telstra's most popular residential plan, HomeLine Plus, is \$27.23 (excl. GST). Accordingly, Telstra receives significantly more revenue from a LSS line than simply the LSS charge.

One possible implication of this is that the use of the LSS by access seekers, as compared to use of the ULLS, may be preferable for Telstra's commercial interests, if consumer demand did develop such that end-users may want to only receive broadband services and not voice i.e. if demand for naked DSL offering became significant. As discussed above, Telstra receives at least the LSS charge (of \$2.50) plus a wholesale line rental charge (of around \$23.12) when an end-user is supplied over the LSS. Comparatively, where an end-user is supplied via the ULLS, as would be the case under a naked DSL scenario, Telstra would only receive a lower ULLS monthly charge (the ACCC set interim determination prices for the ULLS in Band 2

¹⁹⁷ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision*, December 2005, Appendices A and F; ACCC, *Assessment of Telstra's ULLS monthly charge undertaking—final decision*, August 2006, Appendix E.

¹⁹⁸ ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>.

of \$17.70¹⁹⁹ and is currently finalising its views on ULLS prices in those disputes). Accordingly, the ACCC notes that there may be incentives on access seekers to shift to the use of the ULLS in such a scenario, while conversely Telstra may have an incentive to encourage the use of the LSS given the relative returns it receives from provision of these two access services.

Considering the line cost issue involves considering the extent to which the common cost of the underlying line is allocated to the two services provided over it – the voice service and the LSS. Generally, the line rental charge for a voice service has been regarded as the fixed line voice charge that most directly recovers line costs, although cost recovery can occur through whichever services a service provider wishes to allocate costs to. The ACCC's analysis below considers cost recovery in general.

In the purest sense of a TSLRIC costing approach, where only the incremental cost of the LSS is considered, there would be no allocation of line costs to the LSS. This is because there would be an underlying voice service on the line anyway, and line costs would be recovered from the voice service in the absence of the LSS. However, in practice the ACCC uses a TSLRIC+ methodology which does include an allocation of common costs.

In the 2002 pricing principles, the ACCC concluded that it would not allow an allocation of line costs to be recovered in the LSS monthly charge, as it considered that Telstra was already recovering its line costs from other sources:²⁰⁰

...even though it may be preferable from an efficiency in use perspective for there to be some allocation of the cost of an ULL over which a LSS is provided to be included in the price of a LSS, this would have to be dependant on changes to the price of other services. Given the Commission is in no position to determine changes to such prices in either assessing an undertaking or determining an arbitration, it can therefore only have regard to the prices an access provider sets for these other services.

Hence, to the extent that an access provider was recovering all of its line-related costs from other revenue sources, the Commission believes it would be inappropriate for the access provider to recover an additional amount of its line costs in the price of a LSS. If, however, Telstra were to show it was not fully recovering its ULL line costs through its various other sources of revenue, it may be appropriate to consider including some allocation of the cost of the ULL over which a LSS is provided in the price of this service.

As discussed above, the ACCC has consulted on an inclusion of line costs on a number of occasions over the last twelve months. Most recently, the ACCC's Draft Decision specifically sought submissions from interested parties about the inclusion of a contribution to line costs.²⁰¹ The ACCC asked parties for their views on the appropriate methodology to allocate a contribution, including on the necessary data, approach to payment of the contribution, estimation approach for line costs and the

¹⁹⁹ ACCC, *Access dispute between Chime Communications and Telstra—ULLS—reasons for interim determination*, 11 August 2006, published 1 September 2006, available at: <http://www.accc.gov.au/content/index.phtml/itemId/760353>

²⁰⁰ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 96.

²⁰¹ ACCC, *Review of the Line sharing service declaration—draft decision*, August 2007, p. 81.

need for a transition path. Submissions from parties to the Discussion Paper had indicated they would be able to provide further information to the ACCC.²⁰²

Submissions

Interested parties are divided as to whether an allocation of the costs of a line should be included in the price for the LSS.

Telstra argues in favour of the inclusion of some element of line related costs, submitting that:²⁰³

across both LSS and WLR on a given line, Telstra should recover its average loop costs, after taking into consideration WLR and LSS specific costs (including a contribution to overhead costs) – any potential over-recovery of loop costs as a result of LSS making a contribution to line costs should be addressed via a rebate to the purchaser of WLR on the line (where Telstra is the basic access provider on an LSS line, the rebate will be a notional payment from Telstra Wholesale to Telstra Retail);

Telstra submits that if the ACCC cannot be affirmatively satisfied that it is appropriate to exclude line costs, then it should not make pricing principles and indicative prices that exclude line costs. Telstra instead submits that the ACCC should encourage commercial negotiations.²⁰⁴

Telstra also submits that the ACCC is not entitled to only seek submissions from industry about calculating a line cost allocation but has a duty to inquire.²⁰⁵ It is unclear from Telstra's submission which alternative roads of inquiry it is submitting the ACCC should turn to. Telstra itself does not make any submission on how the allocation of the costs of a line should be made between the voice service and the LSS.

Telstra also submits that the ACCC does not have evidence that Telstra is already recovering the costs of lines in existing charges.²⁰⁶

Optus considers that the allocation of common line costs was the key issue to be addressed in determining pricing principles for the LSS.²⁰⁷ Optus submits that a proportion of common line costs should be allocated to the LSS, changing its position as submitted to the 2002 review. Optus submits that two significant changes since 2002 meant that some proportion of line costs should be allocated to LSS:²⁰⁸

- the demand for retail broadband services has increased; and
- the ACCC has declared a wholesale line rental service.

²⁰² Telstra submission to the Discussion Paper, op cit, p. 55; Optus submission to the Discussion paper, op cit, p. 20.

²⁰³ Telstra submission to the Discussion Paper, op cit, p. 55.

²⁰⁴ Telstra submission to the Draft Decision, op cit p. 14.

²⁰⁵ *ibid*, p. 15.

²⁰⁶ *ibid*, p. 15.

²⁰⁷ Optus submission to the Discussion Paper, op cit, p. 18.

²⁰⁸ *ibid*, pp. 18-19.

Optus argues that the increased demand means that broadband is a significant service that should absorb some line costs and that the ACCC now has a mechanism to ensure that the line costs allocated to LSS are deducted from the price of voice services.

Optus notes that, although Ramsey-Boiteux pricing principles would be the most economically efficient way of allocating the line costs between voice services and LSS, the information burden of calculating price elasticities and other parameters would be high. Optus instead suggests an alternative approach:

Optus proposes that the Commission consider the potential for estimating input costs, incremental costs for the LSS and line rental services and demand functions for the two services and then proceed to determine the efficient prices of the services (and allocate common costs accordingly). If the Commission wished to investigate this possibility further Optus would be happy to provide further details of how efficient prices could be estimated.

However, Optus did not provide any response to the ACCC's request in its Draft Decision for further information about how a line cost allocation could be calculated.

AAPT's submission to the ACCC Discussion Paper recognises the appropriateness of including line costs in the LSS price in theory, but submits that, given current pricing arrangements, "no provision for line costs should be included in the LSS price, as to do so would result in Telstra earning above cost revenues across the totality of its network."²⁰⁹ In their response to the Draft Decision, AAPT instead argue that, under the TSLRIC pricing principle, the price of the LSS should not contain an allocation of line costs.²¹⁰

Chime, Adam Internet, Agile and Network Technology all submit that the 2002 LSS pricing principles should continue to be applied.²¹¹ These parties submit that line costs should not be included in LSS annual charges as they continue to be fully recovered in other charges. These parties also submit that, if the ACCC were to consider that a contribution to line costs should be included in LSS annual charges:

- significant public consultation would be needed;
- Telstra would have to make changes to all its wholesale line rental prices; and
- a long transition path should be adopted.

Network Technology's submission in response to the Draft Decision expresses concern about any rebalancing of line costs between the LSS and wholesale line rental.²¹² It submits that, without a transition path for any rebalancing, it would face severe financial hardship given its investment and business decisions. It also submits that even with a transition path, rebalancing would lead to access seekers moving from LSS to ULLS and "essentially force access seekers to become full service providers rather than specialist broadband providers."²¹³ Network Technology submits that this will harm competition for data services.

²⁰⁹ AAPT/PowerTel submission to the Discussion Paper, op cit, p. 14.

²¹⁰ AAPT/PowerTel submission to the Draft Decision, op cit, p. 2.

²¹¹ e.g. Chime submission to the Discussion Paper, op cit, pp. 4-5.

²¹² Network Technology submission to the Draft Decision, op cit, p. 1.

²¹³ *ibid*, p. 2.

Agile's response to the Draft Decision submits that rebalancing should not apply to access seekers who do not acquire wholesale line rental and that it should not apply to any LSS service which is not associated with a wholesale PSTN service.²¹⁴

The CCC submits that it does not believe that the case for a contribution to line costs in the LSS access price has been made out.²¹⁵ It submits that rebalancing is not of great consequence to the access provider, and notes that there is no universally accepted model for allocating costs between the LSS and voice services.

ACCC's consideration of whether to include an allocation of line costs

In general, the recovery of a line cost can occur in a number of different ways that depend on the services provided over the line. As noted by Telstra, line costs would be recovered differently where only a voice service, only a broadband internet service or both a voice and a broadband service are supplied on a line.²¹⁶ The relevant case here is the situation where a voice service and a line sharing service (which would typically be used for broadband internet provision) are provided over the same line.

The LSS service description requires that the service be provided with an underlying PSTN service on the same line. As the LSS shares and uses the copper line over which it is supplied, not including some allocation of line costs may mean that the LSS is effectively under-priced relative to the cost of providing the LSS. The ACCC in 2002 considered that there may be allocative efficiency gains from having some portion of line costs recovered from LSS charges.²¹⁷ However, the assessment of whether to include an allocation of line costs to the LSS monthly charge requires the balancing and consideration of all of the relevant legislative criteria, of which allocative efficiency is only one component.

As noted above, Telstra in all cases receives payments for the line rental and call charges for the underlying voice band PSTN service that is supplied on all lines on which a LSS is also provided. These charges could be either wholesale or retail payments. Accordingly there is already a contribution being made to the cost of the line over and above any contribution from an LSS charge.

The ACCC notes that Telstra raises the point that there are different pricing structures for different declared services.²¹⁸ The ACCC recognises a potential inconsistency between the RMRC interim pricing principle and resulting geographically averaged price for WLR, and the geographically de-averaged cost-based price for ULLS. Any allocation of line costs would need to have regard to this discrepancy. The ACCC will consider these potential pricing inconsistencies more fully in its upcoming review of the declaration of all fixed network services.²¹⁹

²¹⁴ Agile submission to the Draft Decision, op cit, p. 1.

²¹⁵ CCC submission to the Draft Decision on, op cit, p. 2.

²¹⁶ Telstra submission to the Discussion Paper, op cit, p. 36.

²¹⁷ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 6.

²¹⁸ Telstra submission to the Discussion Paper, op cit, p. 48.

²¹⁹ ACCC, *Fixed services review - a second position paper*, April 2007, p. 28.

Recovery of line costs

In the 2002 pricing principles, the ACCC's position was that rebalancing line costs between PSTN charges and LSS charges may result in allocative efficiency gains. The ACCC was concerned that line related charges were too low relative to call charges and that call charges were likely recovering a portion of line costs. The ACCC considered that this may lead to an over-consumption of lines as compared to call services.²²⁰ The ACCC considered that including an allocation of line costs in the LSS charge might enable the cross-subsidy to be ended and a more efficient pricing structure to be adopted.

However, the ACCC concluded, after considering and balancing all the legislative matters, to not include a line cost allocation in the LSS monthly charge, particularly because it considered that Telstra was recovering all of its line-related costs through a range of revenue sources.²²¹

Following the rebalancing of line and call charges noted earlier in this chapter, the ACCC has noted that there is evidence that fixed voice charges, largely made up by line rental charges, now recover the full cost of a line.²²² The ACCC is also assessing efficient line costs in ULLS arbitrations currently before it, allowing the ACCC to better assess this evidence.²²³

Telstra submitted in its response to the Draft Decision that the ACCC did not have evidence that line costs were already being recovered. This is incorrect. The ACCC has examined this issue numerous times in the context of its consideration of whether to allow an access deficit contribution, and considered that the costs of the CAN were recovered by Telstra's revenues.²²⁴

Furthermore, given Telstra's concerns, the ACCC has analysed data received in Telstra's returns²²⁵ under the Regulatory Accounting Framework (RAF).²²⁶ The ACCC has examined the RAF accounts to which Telstra allocates its CAN costs. The type of services to which Telstra allocates its CAN costs are fixed line voice and data services that use the CAN as the access technology. The ACCC's analysis included services that account for 98 per cent of the CAN costs in the RAF. The ACCC then sourced revenue and cost data for those services from Telstra's capital adjusted profit and loss statements prepared on a historic cost basis, and compared the revenues and costs for those services. The RAF data demonstrates that Telstra has an excess of revenues over costs for those services. The excess of revenues over costs also accounts for the other 2 per cent of line costs. This result demonstrates that line costs are currently recovered by Telstra. Significantly, the ACCC's analysis accepted the

²²⁰ *ibid*, p. 95.

²²¹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 102.

²²² ACCC, *Local services review—final decision*, July 2006, p. 64.

²²³ A list of current arbitrations is available on the ACCC's website at: <http://www.accc.gov.au/content/index.phtml?itemId=635059>

²²⁴ For a summary of the ACCC's consideration of the access deficit contribution issue, see, e.g., ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision*, December 2005, p. 78.

²²⁵ The ACCC has examined Telstra's full year return for 2005-06 and the Telstra return for the first half of 2006-07.

²²⁶ ACCC, *Telecommunications industry regulatory accounting framework*, October 2003.

Telstra cost of capital used in the accounts, which is higher than the ACCC's preferred cost of capital. Reducing the cost of capital to the ACCC's preferred value would reduce the costs in the RAF accounts and would therefore increase the excess of revenues over costs which is experienced by Telstra.

The ACCC further assessed whether Telstra would continue to recover its CAN costs over the period of the declaration. Firstly, the ACCC examined Telstra's RAF current costs in the same way as discussed above for historic costs. The results demonstrate that, should Telstra be required to rebuild its current network, its annual revenues are sufficient to meet the annual costs that would be allocated to fixed voice and internet services. Significantly, as current costs provide the cost of building the actual current network in the ground today and do not represent additional efficiencies available from improving network design or utilising replacement technologies, they will overstate the efficient TSLRIC+ costs of the network.

The ACCC also notes that Telstra has, in other contexts, outlined its strong Total Factor Productivity growth across its fixed line infrastructure. This would indicate an expected decline in costs over the period of the declaration. Telstra's public accounts and statements also indicate that any drop in PSTN fixed voice revenues is slowing and that increased revenues from internet services exceed any drop in PSTN fixed revenues.²²⁷

The ACCC has also considered what would happen if competition in internet services saw a reduction in margins and revenues such that these services could no longer make any contribution to Telstra's CAN costs. The RAF accounts indicate that the surplus on fixed-line voice services is sufficient to recover those CAN costs currently allocated to internet services.

The ACCC notes more generally on this issue that Telstra has significant scope under existing retail price control arrangements to increase its line rental charges, and to rebalance line rental and call charges, to account for any perceived under-recovery.²²⁸ Telstra has not chosen to increase its retail line rental prices to the extent allowed under the retail price controls.²²⁹

Based on its assessment, the ACCC considers that Telstra is currently recovering its line costs and will continue to recover its line costs for at least the period of the declaration.

The ACCC considers that, in light of the rebalancing that has taken place and Telstra's current recovery of its line costs, the main issue for consideration is the rebalancing and distribution of the line cost between PSTN voice charges and LSS charges, rather than considering whether costs are being recovered. In particular, any allocation of line costs to LSS charges would have to be deducted from wholesale fixed voice charges such as the wholesale line rental charge (as well as a deemed decrease to Telstra retail fixed voice charges). The ACCC notes that, as the wholesale line rental declaration was formalised in July 2006, the ACCC would be able to

²²⁷ Telstra, *Telstra annual report 2007*, released 28 September 2007, p. 11-12, 23-24.

²²⁸ For an outline of Telstra's retail price control arrangements, see: ACCC, *Telstra's compliance with the price control arrangements: 1H 2005-06*, August 2006, p. 1.

²²⁹ *ibid*, p. 7. In the first half of 2005-06, Telstra was able to increase its line rentals by 3.2 per cent but increased them by 0.3 per cent.

arbitrate if necessary to ensure that this deduction occurred. Alternatively, the ACCC could set LSS prices to include a rebate system.

The ACCC considers it essential that, given the evidence that line costs are fully recovered, any rebalancing would have to ensure that Telstra does not over-recover its line costs. Telstra should not be able to “double-dip” from revenues from both LSS charges and other charges to over-recover its line costs. The most direct adjustment to account for this would be likely to be to the PSTN voice line rental charge, although as noted above, recovery of line costs can be accounted for by whichever services a service provider wishes to allocate costs to.

Consideration of the inclusion of a line cost allocation against the legislative matters

Given these considerations, the ACCC considers that it is appropriate to consider the rebalancing of line costs between PSTN charges and the LSS monthly price against the legislative matters discussed above. This requires consideration and balancing of the various legislative matters.

Long-term interests of end-users – promotion of competition

The ACCC considers that, to the extent that including a line cost component better reflects the costs of provisioning the LSS, a line cost component may be likely to promote competition in the provision of broadband services. The ACCC generally considers that cost-based access prices preserve competitive neutrality between access seekers and access providers and would allow competition on the merits. However, the ACCC also notes that, as the allocation of line costs can happen in a number of ways, there may not be a single “correct” allocation of line costs to the LSS. Accordingly, whether any given allocation better reflects cost of provisioning may be doubtful.²³⁰ The ACCC further notes that an allocation of line costs would only preserve competitive neutrality if it was the “correct” allocation of line costs, and that allocating a too-large amount of line costs would not lead to competitive neutrality.

The inclusion of line costs in the LSS price would also mean that the ULLS might be seen as a more favourable alternative to supply broadband services. An access seeker could employ their DSLAM to provide broadband over either the ULLS or LSS. Access seekers may also be encouraged to also compete for voice services, using the ULLS, in addition to broadband services, which would tend to increase the competition in voice services. The ACCC notes that the Competitive Carriers’ Coalition submits that “access seekers business plans remain committed to migrating to ULLS” and that installation of a DSLAM is the major investment hurdle to using the LSS or ULLS.²³¹ However, as noted above in the ACCC’s consideration of whether the LSS declaration would promote competition, there are potentially significant operational changes and investments required to compete for voice services in addition to broadband services through the use of the ULLS.

The ACCC also understands that there is not a readily available method for migrating LSS connections to the ULLS. Currently, the LSS disconnection and ULLS

²³⁰ However, Ramsey-Boiteux pricing is often regarded as the most economically efficient way to distribute common costs.

²³¹ CCC submission to the Draft Decision, op cit, p. 3.

connection cannot happen in a single step and as a result it is very costly to migrate between the LSS and ULLS. Telstra's submission in response to the Draft Decision confirms that this is currently the case.²³² The lack of this process would tend to limit the ability of firms to switch to the ULLS in response to an LSS price increase. Accordingly, an inclusion of line costs would significantly limit any competition benefits in the use of ULLS for providing either voice or broadband services.

An additional issue is that the LSS has been priced for five years without an allocation of line costs. Access seekers have relied on the previous pricing structure in making investment decisions. The ACCC notes the submissions of access seekers such as Chime, Adam Internet, Agile and Network Technology that make such a submission. Accordingly, the inclusion of a line cost component in the LSS charge may reduce the competitiveness of access seekers in the retail market for high-speed broadband. To the extent that LSS access seekers are not full service voice providers and are unable to readily switch to the ULLS, an increase in the price of the LSS would reduce the potential for rivalry in high speed broadband services. Competitors would be less able to continue supply or commence supply in additional service areas. This may lead to a lessening of competition, in both the short- and long-term, in markets for, in particular, retail broadband services.

Given these considerations Chime, Adam Internet, Agile and Network Technology submit that if a line cost was included in the LSS charge, there would be a need for a transition path from the current situation of no line costs.²³³ The ACCC has used transition paths in the past where sudden changes in the pricing for a service may cause significant shocks. The ACCC considers that a transition path for an allocation of line costs could be appropriate for the reasons discussed. However the need for this would depend on the amount of line costs to be included in the LSS charge and the nature of impediments that access seekers would face in adjusting their existing operations.

Long-term interests of end-users – any-to-any connectivity

The ACCC does not consider that the inclusion of line costs in the LSS monthly price will affect any-to-any connectivity.

Long-term interests of end-users – economically efficient use of and investment in infrastructure

The inclusion of a line cost component may be, in particular, relevant to the LTIE objective of encouraging the efficient use of infrastructure. Allocative efficiency might be expected to be better promoted if an allocation of line costs is included in the LSS monthly charge, as the price of the LSS would better reflect its underlying cost of provisioning. This would tend to discourage over-consumption of the LSS as compared to other related services (such as ULLS, HFC and/or wireless alternatives).

Furthermore, PSTN charges (whether retail or wholesale), and particularly line rental charges, may currently be higher than they would be if the LSS absorbed some of the line costs, which may tend to discourage the efficient use of PSTN voice services by

²³² Telstra submission to the Draft Decision, op cit p. 8.

²³³ e.g. Chime submission to the Discussion Paper, op cit, p. 5.

end-users. The effect of removing some line cost contribution from PSTN prices on demand for PSTN voice services would depend on the price elasticity of PSTN voice services. As this is likely to be relatively inelastic, the changes in demand would be relatively small.

The ACCC notes that, equally, allocative efficiency losses would be experienced if the amount of the line cost contribution that was included was greater than the correct level. Given that broadband service demand would be expected to be relatively price elastic, a too-large line cost allocation would significantly reduce LSS and hence xDSL service consumption. There would also be an inefficient over-consumption of PSTN services. As discussed below, the appropriate allocation of line costs is likely to be relatively small (for example, Telstra has in the past argued for an allocation of line costs of 77c). As such, the risk of allocative inefficiency in the absence of a robust allocation method is likely to be high.

In any case, it is necessary to balance potential allocative efficiency effects against the other regulatory criteria.

More generally, the ACCC considers that efficient investment in the fixed line network will occur provided that Telstra is earning a normal commercial return on its capital investment in the network. The inclusion or not of a line cost component would not affect this, as it simply addresses whether Telstra would recover the line cost from PSTN fixed voice charges alone or the PSTN fixed voice charges and the LSS charge or downstream ADSL charges. As noted above, the ACCC considers that Telstra currently recovers its line costs from its PSTN charges.

The ACCC notes that an introduction of a line cost component may discourage access seeker investment in DSLAM infrastructure, leading to a potential decrease in dynamic efficiency. In this respect, the ACCC notes its discussion above about the LSS providers being first to market with ADSL2+ technology. An introduction of a line cost component may also discourage access seeker investment more generally should access seekers perceive heightened regulatory risk. Such effects could particularly be true if the introduction of the component was sudden. A transition path could reduce this effect.

Legitimate business interests of access provider

The ACCC considers that the legitimate business interests of the access provider are in the recovery of the full costs of the line. The ACCC accordingly does not consider that the inclusion of line costs in the LSS charge or PSTN fixed voice charges is particularly relevant as long as the full cost of the line is recovered. As discussed above, the ACCC considers that evidence from previous ACCC assessments and from Telstra's latest RAF accounts demonstrates that Telstra currently recovers the full costs of the line. Accordingly, the legitimate business interests of the access provider are unlikely to be affected by moving some of those costs to the LSS monthly charge from the PSTN fixed voice charges.

Optus argues that end-users taking a Telstra retail line rental service might be unlikely to benefit from reduced PSTN charges given Telstra's market power in providing

PSTN voice services.²³⁴ Optus argues that Telstra may be unlikely to pass on cost savings to end-users. The ACCC agrees that Telstra would be likely to have market power in the provision of PSTN voice services, given its high proportion of retail end-user access lines.²³⁵ Accordingly, there is a risk that end-users may overpay their line costs when they have a Telstra retail voice service and a LSS service. Telstra's legitimate business interests do not extend to recovering in excess of efficient line costs. However the ACCC does not generally take a price-setting role in retail markets.

Interests of access seekers

The ACCC considers that the interests of access seekers largely relate to the ability to compete on their merits for end-user customers in the market for high-speed broadband. The inclusion of a line cost in the LSS charge may make it more difficult for some firms to compete, but as long as all competitors face the same costs and are given adequate opportunity to adjust operations in response to any price change, the interests of LSS access seekers should not be harmed. LSS access seekers also acquiring a wholesale PSTN service should not suffer harm from the inclusion of a line charge in the LSS price.

However, as noted in the section on the promotion of competition, in the event of a reasonable method of allocating line costs, there may be a need to include a transition path for the inclusion of line costs, given that access seekers have made investment decisions on the basis of the current pricing structure.

Direct costs of providing access to the LSS

As noted above, strictly speaking, the direct cost of the LSS is limited to the specific costs of the service. However an allocation of line costs may be appropriate for other reasons. The ACCC does not consider that the inclusion of a line cost affects the recovery of the direct costs of providing access to the LSS.

The ACCC notes its considerations above of the direct costs matter in considering the specific costs of the LSS. As noted by the Tribunal, the relevant consideration is whether Telstra can recover its direct costs of the LSS. The ACCC is satisfied that Telstra is recovering its direct costs of providing access to the LSS either with or without a line cost contribution.

Value to a party of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC does not consider that this matter is affected by the inclusion of a line cost in the LSS charge. Telstra already recovers the costs of LSS ordering and management systems in the specific cost component of the LSS monthly charge.

²³⁴ Optus submission to the Discussion Paper, op cit, p. 21.

²³⁵ ACCC, *Telecommunications market indicator report 2005-06*, August 2007, p. 8.

Operational and technical requirements necessary for the safe and reliable operation of a carriage service, telecommunications network or facility

The ACCC considers that the inclusion of a line cost in the LSS charge is unlikely to affect the operation and technical requirements necessary for the safe and reliable operation of telecommunications services.

Economically efficient operation of a carriage service, telecommunications network or facility

The ACCC considers that the considerations under this matter are the same as the considerations of economic efficiency in the long-term interests of end-users.

Approaches to calculating the allocation of line costs

The ACCC's assessment above is largely premised on the idea that the ACCC can calculate a "correct" or "appropriate" allocation of line costs to be included in the LSS price. However, it is necessary to consider how the portion of line costs to be included would be calculated. As noted above, the common cost of a line could conceivably be distributed between line rental and the LSS in any number of ways.

It is important to note that, while allocative efficiency gains may be achieved by a "correct" allocation of line costs to the LSS charge, allocative inefficiency would equally be incurred by an "incorrect" allocation of line costs. Similar considerations apply to consideration of competition effects. Accordingly, a reliable approach to allocating line costs is necessary to achieve potential benefits under the legislative matters.

As noted in the ACCC's Draft Decision, a number of suggested approaches have been put to the ACCC. Submissions to this inquiry have mentioned Ramsey pricing or other, joint production theory alternatives. Both Telstra and Optus submit in their submissions to the Discussion Paper that they could make further submissions on possible approaches if necessary, although neither party did provide further submissions in response to questions in the ACCC's Draft Decision. Telstra also argued in March 2005 that 77 cents of line costs should be allocated to the LSS, based on a joint production theory calculation, although that calculation was based on a premise that line rental prices did not recover line rental costs.²³⁶ As part of that submission, Telstra did provide estimated elasticities for basic access and the LSS, although much of that information is concealed on commercial-in-confidence grounds. It is important to note that a corresponding drop in the line costs allocated to PSTN charges would be crucial in ensuring that an allocation of line costs to the LSS is appropriate, which is a distinction between Telstra's March 2005 submission and the present scenario.

More recently, Telstra has made submissions to the ACCC in the context of LSS arbitrations that suggest that 33 per cent or 50 per cent of line costs be allocated to the

²³⁶ ACCC, *Public version of Telstra's submission in support of the SSS monthly charges undertaking dated 13 December 2004*, March 2005, Appendix G.

LSS.²³⁷ The ACCC rejected Telstra's proposed approach in setting interim determinations in the arbitrations as it considered that the approach produced charges across LSS and WLR that were too high and that an immediate introduction of a new price construct could unduly harm competition.²³⁸ The ACCC affirmed that position in making its final determination in the Chime-Telstra and Request-Telstra LSS arbitrations.²³⁹

Ramsey pricing argues that welfare is maximised where common costs are recovered in a way that minimises distortions to demand. Ramsey pricing does this by distributing a greater proportion of common costs to goods that are more price inelastic. The ACCC agrees that, in theory, Ramsey pricing would be an efficient and appropriate approach to distributing common line costs. However, the ACCC has noted in the past in the context of MTAS prices that Ramsey pricing has significant informational and practical difficulties.²⁴⁰ Telstra submits the same point in the context of this review.²⁴¹ Notably, Ramsey pricing requires robust and up-to-date price elasticity information. Robust and up-to-date price elasticity information has not been provided to the ACCC and it is unaware of any alternative sources for such information. Given the likely price elasticities of ADSL and of PSTN voice services, it could be expected that any allocation of line costs to the LSS would be a relatively small amount and close to 0 per cent under a Ramsey pricing method. As noted above, VoIP and mobile voice services do not provide a sufficient alternative to fixed voice services at present, although this might change over time. Overall, the ACCC is unable to draw any further conclusions absent robust elasticity information.

In the absence of any robust information appropriate for Ramsey pricing, it is appropriate to consider alternative approaches. As noted, both Optus (to this inquiry) and Telstra (in its March 2005 supporting submission to its undertaking) have previously put forward approaches based on joint production theory and the relative costs of the line, the LSS and line rental. That approach requires knowledge of the input costs for the joint line input, incremental costs for the line rental and LSS services, and demand functions for the two services. Optus submits that this may be a simpler allocation rule.²⁴² The ACCC does have access to a significant amount of cost data about the fixed line network. However it does not consider that all of the cost information available to it is robust in all situations.²⁴³ As mentioned above, the ACCC is examining line costs in ULLS arbitrations currently before it. However, the ACCC notes that this joint production theory approach, like Ramsey pricing, requires robust price elasticity information.

²³⁷ ACCC, *Access dispute between Chime and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 19 Jan 07, p. 7, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²³⁸ *ibid.*, p. 9.

²³⁹ ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, p. 27-30, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁴⁰ ACCC, *Optus' undertaking with respect to the supply of its domestic GSM terminating access service (DGTAS)—final decision*, February 2006, pp. 66-88.

²⁴¹ Telstra submission to the Discussion Paper, *op cit.*, p. 37.

²⁴² Optus submission to the Discussion Paper, *op cit.*, p. 20.

²⁴³ ACCC, *Assessment of Telstra's ULLS monthly charge undertaking—final decision*, August 2006, Appendix B.

The ACCC's Draft Decision concluded that the ACCC lacked sufficient information to enable it to make or assess an allocation of line costs to the LSS monthly charge. The ACCC considered that it could not include a line cost component in the absence of a robust calculation method.²⁴⁴ Accordingly, the ACCC specifically sought submissions from interested parties on an appropriate methodology for the calculation of line costs and the inputs necessary to perform the calculation.²⁴⁵

The ACCC has outlined possible approaches, but considers that there is no data currently available to it to allow those approaches to be applied. In particular, robust elasticity information is needed to allow the use of Ramsey pricing or joint production theory, and the ACCC considers that more arbitrary approaches would not be appropriate.

How would the cost allocation work?

Although the ACCC is unable to calculate a line cost contribution, the ACCC considers it appropriate to discuss how an allocation of line costs could be structured. Two potential approaches could be used – either a rebate system on a particular line or an allocation of a total cost across all voice lines.

The rebate system would use a rebate from the LSS provider to the line rental provider. This system would mean that the line cost is only distributed between line rental and the LSS where both services are being provided over the line.

Telstra proposed a rebate system in submissions to the ACCC in the context of arbitrations.²⁴⁶ While the ACCC considers that a rebate system may be appropriate, it does not consider that Telstra's particular approach, including a cap on rebates, would be appropriate.

Optus submits that the rebate would be inappropriate where Telstra is the retail voice service provider.²⁴⁷ Similarly, Agile submits that rebalancing should not apply to any LSS service not associated with a wholesale PSTN service.²⁴⁸ The ACCC considers that it would be appropriate that the rebate be provided to Telstra where it is the retail line rental provider or to other companies where they are reselling Telstra wholesale line rental. The ACCC notes that Telstra or other companies may not pass on all savings to retail customers, but does not consider that the ACCC should be involved in retail price setting. Competition should dictate how the cost adjustments are passed on to end-user customers.

The ACCC notes Network Technology's submission that administrative arrangements for a rebate system could be complex and costly as it would require continual

²⁴⁴ ACCC, *Review of the Line sharing service declaration—draft decision*, August 2007, p. 81.

²⁴⁵ *ibid.*, p. 81.

²⁴⁶ ACCC, *Access dispute between Chime and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 19 Jan 07, p. 7, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁴⁷ Optus submission to the Discussion Paper, *op cit.*, p. 21.

²⁴⁸ Agile submission to the Draft Decision, *op cit.*, p. 1.

updating of records as to retail voice providers.²⁴⁹ This would potentially be a reason not to prefer a rebate system.

The ACCC considered in its 2002 review the issue raised by OfTel that a rebate system may lead to “presentational difficulties” where different end-users are charged different line rental charges depending on whether they are acquiring broadband over the LSS.²⁵⁰ Given the presence of different line rental packages and the use of bundling in retail markets, the ACCC considers that this would be unlikely to be an issue.

The alternative approach would be based on calculating the total line costs recovered by all LSS monthly charges, calculating the amount that is implied as being contributed by ADSL charges, and then calculating the total amount of line costs recovered through charges for internal and external line sharing. That total amount would then be distributed as an average across all line rental lines. The average cost could then be deducted from WLR and ULLS prices. However the ACCC notes that this system could require considerable monitoring and updating of charges as LSS consumption grew or shrank.

This approach may ensure a simpler pricing structure where the charge for a given service is not dependent on whether the line is being shared, and might also better reflect the underlying preferences of consumers for voice and broadband.

ACCC’s overall view on whether to include an allocation of line costs

The ACCC considers that, under the relevant legislative matters, there may be benefits from the inclusion of an appropriate rebalancing of line costs to the LSS monthly charge from PSTN charges. In particular, the inclusion of a “correct” amount of line costs would be likely to lead to allocative efficiency gains and may lead to increased competition for voice services. However the ACCC notes that, under the legislative matters, the inclusion of line costs may have negative competition effects on downstream services if brought in without a transition period, and would be likely to have negative dynamic efficiency effects. It also notes that the appropriate amount of line costs is likely to be relatively small under an efficient rebalancing allocation method, and that allocating a too-high amount of line costs to the LSS would equally lead to allocative inefficiencies and decreased competition.

The ACCC also notes that the recovery of some allocation of line costs does not have significant implications for a number of the legislative matters. For example, the legitimate business interests of the access provider in recovering its line costs are not significantly affected by whether cost recovery occurs as part of a voice line rental or LSS charge. As discussed, the ACCC considers that its analysis demonstrates that Telstra is currently recovering its line costs.

Relevantly, Telstra in all cases receives payments for the line rental and call charges for the underlying voice band PSTN service that is supplied on all lines on which a

²⁴⁹ Network Technology submission to the Draft Decision, op cit, p. 3.

²⁵⁰ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the Trade Practices Act 1974*, August 2002, p. 94.

LSS is also provided. Accordingly there is already a contribution being made to the cost of the line over and above any contribution from an LSS charge.

The ACCC notes that a corresponding drop in the line costs allocated to retail and wholesale PSTN charges is crucial in ensuring that an allocation of line costs to the LSS is appropriate under the legislative matters.

There is not at present a robust method for distributing line costs between PSTN charges and the LSS. In particular, certain proposed methods have significant informational difficulties, while other approaches are too arbitrary. In these circumstances, the risks to competition and efficiency associated with including too large a line cost component are significant.

While the ACCC has sought to obtain the necessary information to calculate a line cost allocation, including seeking submissions from parties, it does not have sufficient information available to it to calculate a line cost allocation.

The ACCC notes Telstra's contention that the ACCC has not proactively sought information and that seeking submissions from interested parties is insufficient.²⁵¹ However, the ACCC considers that its approach is appropriate and that it has proactively sought information from interested parties and considered alternative sources of information available to it, as demonstrated in the discussion above. The ACCC has made all reasonable inquiries and given parties full opportunity to comment, and met its legislative obligations.

Overall, the ACCC's final view is that it considers that it cannot include a line cost component in the LSS monthly charge. The case for an inclusion of line costs is finely balanced under the legislative matters. Even if a 'correct' allocation of line costs could be calculated, potential allocative efficiency and competition gains are balanced against possible negative effects on competition, the interests of access seekers and on dynamic efficiency. These negative effects would be particularly exacerbated if the allocation of line costs is greater than an efficient level. Furthermore, it is significant that the potential allocative efficiency and competition gains discussed above would not be achieved if the allocation of line costs was too large. There is significant risk of an allocation being in error given the absence of the necessary information for calculating an allocation. The ACCC also notes that the inclusion of a line cost allocation in the LSS charge is neutral to the legitimate business interests of the access provider. Given this balanced consideration under the criteria even if the 'correct' allocation could be calculated, and the absence of a robust calculation method, the ACCC's view, having regard to the legislative matters, is to not include a line cost component in the LSS monthly charge.

Connection and disconnection charges

As noted above, the connection charges and disconnection charges for the LSS relate to the costs of technicians performing jumpering work inside Telstra exchanges, travel and vehicle costs for the technicians, costs of back-of-house management or assistance for technicians, materials costs and indirect costs. The ACCC has previously considered such charges in its assessment of a Telstra LSS connection and

²⁵¹ Telstra submission to the Draft Decision, op cit, p. 15.

disconnection charge undertaking.²⁵² The ACCC has also set single LSS connection and disconnection charges in interim determinations in arbitrations²⁵³ and in final determinations recently made in LSS access disputes between Request and Telstra and Primus and Telstra.²⁵⁴ The ACCC has set final managed network migration charges in a final determination in the LSS access disputes between Chime and Telstra, Primus and Telstra and Request and Telstra.²⁵⁵

These charges should be set to recover these costs that an efficient access provider will incur on a forward-looking basis. A number of practical issues arise in implementing this principle.

Technician labour, vehicles, travel, tool and materials (copper wire) costs.

Consistent with the approach taken in both undertaking assessments and arbitrations, the ACCC considers that it is most appropriate to determine efficient connection and disconnection by reference to the charges paid by Telstra to third party contractors to perform jumpering work in Telstra exchanges.²⁵⁶ In particular, the ACCC considers that it should assess efficient jumpering, travel, vehicle and tools costs based on contractor charges.

Telstra tenders out connections work to contractors on a competitive basis. When a contractor performs this work, it incurs the costs associated with technician labour, vehicles, travel, tool and materials (copper wire).

The installation work for the LSS and ADSL is functionally similar, as each involves the installation of jumpers between a DSLAM and PSTN switch and removal of the existing jumpers on the MDF. As a result, the efficient, forward-looking cost of connecting the LSS and ADSL services will be the similar.

As a result, contractor charges for ADSL and LSS connection work can provide a basis upon which to assess the efficient, forward-looking level of these costs.

An average of these charges can be adopted. Alternatively, where a disaggregated rate table only is available, likely costs can be assessed by reference to the anticipated distribution of connections amongst the various price points.

It may be that Telstra uses a mix of own staff and third party contractors to connect LSS and ADSL services, as well as other services including the ULLS. Historically,

²⁵² ACCC, *Assessment of Telstra's LSS undertaking relating to connection and disconnection charges—final decision*, April 2006.

²⁵³ ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of interim determination and associated statement of reasons*, Dec 06, published 23 Feb 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁵⁴ ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>. The determinations for the Primus dispute are available at the same web page.

²⁵⁵ ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, 12 Jul 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>. The determinations for the other two disputes are available at the same web page.

²⁵⁶ ACCC, *Assessment of Telstra's LSS undertaking relating to connection and disconnection charges—final decision*, April 2006, pp. 23-35.

different levels of costs may have been associated with connection work performed by contractors, or own staff.

However, the ACCC considers that contractor charges are an appropriate benchmark for the efficient forward-looking level of costs for the jumpering, travel, vehicle and materials cost categories. It is reasonable to expect that in future the costs of all LSS (and ADSL) connections work will be at the level implied by contractor charges. This is because an efficient access provider will be able to use contractors to a greater extent and/or the level of costs when own labour is used will closely approach the levels implied by the contractor charges. Given that contractors are recovering their incremental costs (such as labour, travel and materials) and a contribution towards overheads and profit from their charges, it is not apparent why an access provider could not also achieve this level of costs when connecting the LSS and downstream services itself.

Accordingly, the resulting contractor rates can provide an appropriate cost benchmark for the efficient, forward-looking costs for these cost categories for all LSS connections.

Back-of-house costs

Back-of-house activities include providing manual service qualifications, validating point of interconnection (POI) data and responding to faults in POI cables. These activities are performed by Telstra staff and so there is no opportunity to estimate these costs by reference to an external tender process.

In these circumstances, a simple bottom-up cost model can be used to estimate the costs that an efficient operator would incur in performing these activities. The ACCC considered these costs in its assessment of Telstra's LSS connection and disconnection undertaking and in arbitrations.²⁵⁷

While historically observed costs can be used as a starting point, care should be taken to ensure that historical costs are adjusted to better reflect efficient costs. For instance, historic costs may be based upon a level of manual intervention by staff that could be efficiently avoided by greater automation of tasks.

Indirect costs

Indirect costs, such as labour on-costs for own staff, or contract management costs for contractors, are allowed for by a mark-up over direct costs. An allowance of around 10 per cent above contract rates is reasonable for contract management, based on Telstra's own modelling of supervision costs.²⁵⁸

Disconnection charges

Where a LSS disconnection request is made as a result of an end-user churning the downstream DSL service to another service provider, there is the potential for the

²⁵⁷ ACCC, *Assessment of Telstra's LSS undertaking relating to connection and disconnection charges – final decision*, April 2006, pp. 37-43; Consultel, *Analysis of ULLS and LSS undertakings and subsequent submissions – final report*, February 2006, pp. 30-38 and pp 56-57.

²⁵⁸ *ibid*, pp. 27-28.

removal of the existing jumpers being combined with installing the new jumpers on the relevant line. Where this work is combined, then overall costs can be significantly reduced, and costs of removing redundant jumpers recovered within the relevant connection charge. Accordingly, where disconnection costs can be avoided by a churn process, the ACCC considers that disconnection charges should not be payable.

Telstra has recently established a LSS/DSL churn process, and does not charge for disconnections that occur pursuant to it. This churn process has the potential to ensure that disconnection charges are only levied in those instances where an efficient access provider would need to separately disconnect a LSS. However, the success of these processes will depend upon participation by significant service providers, including Telstra BigPond.

For present purposes and determining when a disconnection charge should be levied, the ACCC considers that these pricing principles should be harmonised with the Telstra LSS/DSL churn process. However, this may need to be revised in future if a significant number of services remain outside the ambit of the Telstra LSS churn process, or any problems or limitations in the process that may subsequently be identified in the process are not able to be resolved.

Averaging or de-averaging

Given the ACCC's final decision not to include a line cost component in the LSS charge, the issue of averaging or de-averaging of LSS monthly charges is a moot point, as 'specific costs' are not geographically dependent.

The ACCC's Draft Decision discussed the issue of whether a LSS monthly charge that did include a line cost component should be geographically averaged or de-averaged. The ACCC considers it appropriate to set out its final view on this issue, despite the ACCC's final decision not to include a line cost contribution.

Parties' submissions contain varying views on whether the LSS charge should be geographically averaged or de-averaged. Telstra argues that LSS prices should be geographically averaged.²⁵⁹ Optus argues that LSS charges should be geographically de-averaged, citing the Australian Competition Tribunal's decision in May 2007 on Telstra's ULLS undertaking.²⁶⁰ There were no other significant submissions on this issue.

As noted in the Draft Decision, an inclusion of a line cost in the LSS charge would effectively be an inclusion of some costs of a ULLS. Both the ACCC and the Tribunal have considered the geographic averaging of ULLS charges and concluded that they could not be satisfied that averaging would be reasonable, having regard to the legislative matters.²⁶¹

²⁵⁹ Telstra submission to the Discussion Paper, op cit, p. 55.

²⁶⁰ Australian Competition Tribunal, *Telstra Corporation Limited (No 3)* [2007] ACompT 3

²⁶¹ ACCC, *Assessment of Telstra's ULLS monthly charge undertaking—final decision*, August 2006, Appendix C; Australian Competition Tribunal, *Telstra Corporation Limited (No 3)* [2007] ACompT 3 at [53] to [291].

Given the ACCC's previous analysis and the Tribunal's conclusions, the ACCC's considers that, were a line cost component to be included in the LSS monthly charge, the charge should be geographically de-averaged.

While in principle, prices should be geographically de-averaged, the ACCC has previously specified geographically averaged connection and disconnection charges for the LSS, despite varying travel costs in different geographic regions.²⁶² The ACCC considers that, where the difference in costs between regions is not great, it may be appropriate to geographically average connection charges where the distortionary effect is not significant.²⁶³ Furthermore, the concentration of LSS and ADSL services within Bands 1 and 2, where efficient, forward-looking costs are similar, means that the use of an averaged connection charge is not likely to have a distortionary effect.

Revenue effect of VoIP

The ACCC also sought submissions from parties on whether VoIP services had affected Telstra's ability to recover the costs of providing a line. Telstra does not directly address this issue. Optus submits that, given the requirement to have an underlying voice service on any LSS line, Telstra can recover the cost of a line through line rental and that VoIP was effectively unrelated to LSS access seekers.²⁶⁴ It submits that any other revenue losses were due only to competition from competitors. AAPT submits that VoIP is not an effective substitute for existing voice band analogue voice and that VoIP was only substituting for phone card calls rather than traditional voice calls.²⁶⁵

The ACCC considers that VoIP does not appear to have affected Telstra's ability to recover the costs of providing a line. This is for two reasons. Firstly, the requirement that an LSS be provided over a line with an underlying voice service ensures that Telstra will receive line rental charges that go towards the costs of a line. Secondly, Telstra's rebalancing of line charges and call charges discussed above now means that line costs are adequately recovered in line rental charges. Even if all phone calls are made through the use of VoIP, line rental charges should recover the cost of the line.

3.2 Indicative prices

The ACCC is currently arbitrating a number of access disputes relating to the LSS. Given the extensive consultation process being undertaken in those disputes, the ACCC considers that it is in a position to make indicative prices for the LSS.

The ACCC has recently made a final determination in LSS access disputes involving Chime and Telstra on 12 July 2007, and between Primus and Telstra and Request and

²⁶² ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁶³ ACCC, *Assessment of Telstra's LSS undertaking relating to connection and disconnection charges—final decision*, April 2006, pp. 56-57.

²⁶⁴ Optus submission to the Discussion Paper, op cit, p. 21.

²⁶⁵ AAPT/PowerTel submission to the Discussion Paper, op cit, pp. 3-4, 15.

Telstra on 1 August 2007.²⁶⁶ The ACCC is currently arbitrating a further six LSS access disputes.²⁶⁷

As these disputes are finalised, the ACCC may decide to publish some or all of an arbitration determination. The ACCC has published the final determination and its statement of reasons in the Chime-Telstra, Request-Telstra and Primus-Telstra LSS disputes.²⁶⁸ The ACCC considers that having regard to such published determinations is appropriate in providing indicative prices.

The ACCC considers that it is appropriate to signal indicative prices for both monthly charges and connection and disconnection charges for the LSS, taking into account the pricing principles outlined above. These indicative prices would apply from 1 January 2008. At this stage the ACCC would intend for indicative prices to apply until 31 July 2009, but notes that it may be necessary to update the prices if newer information was provided to the ACCC by Telstra (particularly on third party contractor connection charges).

Telstra submits in its submission in response to the Draft Decision that it is inappropriate to determine indicative prices for the LSS.²⁶⁹ It argues this because:

- there is uncertainty around a line cost contribution,
- contractor charges for connections and disconnections are likely to vary over time
- the ACCC has already published final determinations in LSS access disputes and that indicative prices are contrary to the negotiate/arbitrate model in the TPA.

Telstra also submits that there is an inevitable error in setting LSS prices.²⁷⁰

The ACCC does not consider that these are reasons not to issue indicative prices at this stage. Firstly, as discussed above, the ACCC has decided that it should not include a contribution to line costs in the LSS charge. Secondly, the ACCC agrees that contractor charges may vary and will set indicative prices to reflect the likely change in those charges.

Thirdly, Telstra's submissions about the negotiate/arbitrate model misconceive the nature of the legislative regime. The ACCC considers that indicative prices under

²⁶⁶ ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07.

ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07.

ACCC, *Access dispute between Primus Telecommunications and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07.

All three final determinations are available at

<http://www.accc.gov.au/content/index.phtml?itemId=793060>.

²⁶⁷ A list of current arbitrations is available on the ACCC's website at:

<http://www.accc.gov.au/content/index.phtml?itemId=635059>

²⁶⁸ All three published final determinations are available at

<http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁶⁹ Telstra submission to the Draft Decision, op cit p. 16.

²⁷⁰ Telstra submission to the Discussion Paper, op cit, p. 35.

section 152AQA of the TPA are a more appropriate mechanism to indicate prices than the publication of bilateral determinations in access disputes. The express legislative provision for indicative prices demonstrates that pricing principles and indicative prices are not contrary to the TPA. Rather, they provide non-binding signalling of the ACCC's view of reasonable prices. Negotiation and arbitration are examples of a number of rights under the legislation, but are not the only or a more important mechanism than other mechanisms.

In relation to Telstra's submissions about inevitable regulatory price-setting error, the ACCC does not consider that Telstra's submissions are convincing. Given the substantial consideration that has been given by the ACCC to LSS pricing, the ACCC considers that it has sufficient information to allow it to set LSS prices. The ACCC considers that the data presented by Telstra purporting to demonstrate inevitable regulatory pricing error occurring in Europe and Australia fails to account for the differing regulatory regimes in the jurisdictions identified, and is of limited value.

The ACCC considers that making indicative prices for the LSS will provide useful certainty and guidance to the industry about the appropriate pricing for the LSS.

Monthly charges

The ACCC's indicative price for LSS monthly charges is \$2.50 per service per month, reflecting the price set in recent LSS arbitration final determinations. That price is calculated using cost information provided by Telstra in the course of undertaking assessments.²⁷¹ Consistent with the Tribunal's views, as discussed above, the ACCC has:

- pooled the specific costs associated with the LSS and ULLS with Telstra's own internal costs of a nature equivalent to the specific costs of the LSS and ULLS
- allocated the pooled costs to a demand base including all LSS, ULLS and downstream ADSL services.

The ACCC also considered the level of the efficient specific costs and efficient internal equivalent costs, the appropriate weighted average cost of capital, and appropriate demand figures. The ACCC also reflected the Tribunal's views that it would be appropriate to use a longer time period than four years for levelising costs. The ACCC levelised over an eight year period reflecting the available data and the need to ensure that costs can be recovered.

Further details on the ACCC's approach are available in the ACCC's published reasons for the final determination in the Chime-Telstra LSS access dispute.²⁷²

²⁷¹ In particular, the ACCC used ULLS and LSS cost information provided in witness statements from a Telstra employee dated 3 and 11 August 2006 in the ACCC's assessment of Telstra's ULLS monthly charges undertaking. Public versions of the statements are available at: <http://www.accc.gov.au/content/index.phtml?itemId=771159>

²⁷² ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

Reflecting its views on the inclusion of a line cost contribution, the ACCC has only accounted for specific costs in the LSS monthly charge.

The ACCC notes that, to the extent international prices can be considered relevant, the indicative prices determined below fall within the range of prices specified in European jurisdictions.²⁷³ In particular, the average monthly charge for shared local loop access in the European Union at October 2006 was €2.88, or around A\$4.52. European prices are as low as €0.70 per month, which is the cost in the Netherlands.

Connection and disconnection charges—‘single’ services

The ACCC’s indicative prices for LSS connections and disconnections, where the service is not connected or disconnected in a managed network migration of services, are:

Charges for LSS connections and disconnections not made in a managed network migration	Charge (1 January 2008 until 30 June 2008)
LSS connections	\$41.40 per connection
LSS disconnection	\$37.10 per connection. However a disconnection charge will not be payable where: <ul style="list-style-type: none"> ▪ the disconnection is made pursuant to the Telstra LSS churn process, or ▪ the access seeker is participating in the Telstra LSS churn process and Telstra (BigPond) is not participating in the Telstra LSS churn process

As discussed above, the ACCC calculates efficient connection charges by reference to third party contractor quotes given to Telstra to perform jumpering work in exchanges. Telstra has provided quotes in the course of previous regulatory processes that the ACCC has used to assess the efficient level of jumpering, travel, vehicle and materials costs. The ACCC has also included a 10 per cent allowance for indirect costs and an appropriate allowance for back-of-house management costs.

The ACCC’s approach to LSS disconnection charges reflects Telstra’s development of a LSS churn process that co-ordinates disconnections and connections of LSS and ADSL services, and the ACCC’s view that an efficient coordination process would mean that disconnection costs can be subsumed into the costs of the new connection.

²⁷³ Commission of the European Communities, *European electronic communications regulation and markets 2006 (12th report)*, COM(2007) 155, 29 March 2007, Annex, p. 76.

The above prices have been revised slightly from the draft indicative prices to reflect information provided in the context of the six LSS arbitrations that the ACCC is currently arbitrating.

The above charges are based on data for the 2007-08 financial year. The ACCC notes Telstra's submissions that indicative prices should not be set because of the possibility that contractor charges may vary over time.

The ACCC does not consider that this is a reason not to set indicative prices as long as the possible variation is accounted for. The ACCC has, in setting connection charges in final determinations for LSS access disputes, recognised that labour costs and contractor charges are likely to change over time. It has accordingly set different prices for different financial years, reflecting average rates of change in labour rates.²⁷⁴ Such an approach would also be open to parties commercially negotiating access conditions.

The ACCC considers that it would be appropriate to apply this approach to obtain indicative prices to apply after the end of the 2007-08 financial year. The ACCC has applied in its cost model a percentage change in labour prices derived from the data from the Australian Bureau of Statistics.²⁷⁵ This leads to the following indicative charges to apply from 1 July 2008:

Charges for LSS connections and disconnections not made in a managed network migration	Charge (1 July 2008 until 31 July 2009)
LSS connections	\$43.10 per connection
LSS disconnection	\$38.70 per connection. However a disconnection charge will not be payable where: <ul style="list-style-type: none"> ▪ the disconnection is made pursuant to the Telstra LSS churn process, or ▪ the access seeker is participating in the Telstra LSS churn process and Telstra (BigPond) is not participating in the Telstra LSS churn process

Given the nature of these prices as indicative rates only, it would be open to the ACCC to consider evidence of a different price change if considering LSS connections prices in the future.

²⁷⁴ ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07, p.55, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

²⁷⁵ Australian Bureau of Statistics, *6345.0 Labour Price Index, Australia, Jun 2007*, release 15 August 2007, p. 16. The ACCC has applied the 4.15 per cent rate of change between 2005-06 and 2006-07 in the ordinary time rates of pay excluding bonuses for the private sector communications services industry as a best indicator of likely changes in labour costs between 2006-07 and 2007-08.

Further details on the ACCC's approach to setting single connection and disconnections costs are available in the ACCC's published reasons for the final determination in the Request-Telstra and Primus-Telstra LSS access disputes.²⁷⁶

Connection and disconnection charges—managed network migrations

A managed network migration is the transfer or migration of services that is achieved by the project management by Telstra of a co-ordinated cancellation and connection of services.

The ACCC's indicative prices for LSS connections, where the service is connected or disconnected in a managed network migration of services where the LSS is connected on a line that Telstra is using to supply a wholesale ADSL service, are:

Charges for LSS managed network migrations	Charge (1 January 2008 until 30 June 2008)
Connections - fixed amount	\$134.50 per MNM
Connections -variable amount	\$30.90 per connection
Connections – minimum charge	\$752.50 per exchange per MNM
Disconnection charge	\$0

There is to be a minimum connection charge per exchange for an MNM where the LSS is connected on a line that Telstra is using to supply a wholesale ADSL service of \$752.50, reflecting the costs for a 20 connection MNM.

The fixed component in the MNM charge reflects the administrative costs incurred by Telstra to project manage the MNM. The variable component reflects the jumpering costs for each connection made as part of the MNM.

No disconnection charges are to be allowed where an LSS is disconnected as part of a MNM. This reflects the view that any associated disconnection costs would be taken into account in the MNM connection charge.

Again, the ACCC has calculated efficient connection charges by reference to third party contractor quotes given to Telstra to perform jumpering work in exchanges. The ACCC has also taken into account information on Telstra's project management and administrative costs for MNMs.

²⁷⁶ ACCC, *Access dispute between Request Broadband and Telstra—LSS—publication of final determination and associated statement of reasons*, 1 Aug 07, published 24 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

As noted above for single LSS connections and disconnections, it is appropriate to take into account possible changes in labour costs. The ACCC has applied the same ABS data to derive LSS MNM charges for the period after 1 July 2008:

Charges for LSS managed network migrations	Charge (1 July 2008 until 31 July 2009)
Connections - fixed amount	\$140.10 per MNM
Connections -variable amount	\$32.20 per connection
Connections – minimum charge	\$784.10 per exchange per MNM
Disconnection charge	\$0

As noted above for single connections, it would be open to the ACCC to consider evidence of a different price change if considering LSS MNM prices in the future.

Further details on the ACCC’s approach are available in the ACCC’s published reasons for the final determination in the Chime-Telstra LSS access dispute.²⁷⁷

3.3 Conclusion

In conclusion, the ACCC’s decisions are that:

- a TSLRIC+ pricing principle should be applied to the LSS
- a specific cost component should be included in the LSS monthly price, calculated by combining ‘LSS-specific costs’ with ‘ULLS-specific costs’ and Telstra’s internal equivalent costs for ADSL, and allocating those costs across the number of active ULLS, LSS and ADSL lines
- a contribution for line costs will not be recovered in the LSS monthly price
- connection and disconnection charges should be set with reference to the amounts charged by third party contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.

The ACCC has issued indicative prices for the LSS to apply between 1 January 2008 and 31 July 2009. Those prices are:

²⁷⁷ ACCC, *Access dispute between Chime Communications and Telstra - LSS - publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>

	Charge
LSS monthly charge	\$2.50 per service (1 Jan 2008 to 31 Jul 2009)
LSS connection not made in a managed network migration	\$41.40 per connection (1 Jan 2008 until 30 Jun 2008) \$43.10 per connection (1 Jul 2008 until 31 Jul 2009)
LSS disconnection not made in a managed network migration	\$37.10 per connection (1 Jan 2008 until 30 Jun 2008) \$38.70 per disconnection (1 Jul 2008 until 31 Jul 2009) However a disconnection charge will not be payable where: <ul style="list-style-type: none"> ▪ the disconnection is made pursuant to the Telstra LSS churn process, or ▪ the access seeker is participating in the Telstra LSS churn process and Telstra (BigPond) is not participating in the Telstra LSS churn process
LSS managed network migration - fixed amount	\$134.50 per MNM (1 Jan 2008 until 30 Jun 2008) \$140.10 per MNM (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - variable amount	\$30.90 per connection (1 Jan 2008 until 30 Jun 2008) \$32.20 per connection (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - minimum charge	\$752.50 per exchange per MNM (1 Jan 2008 until 30 Jun 2008) \$784.10 per exchange per MNM (1 Jul 2008 until 31 Jul 2009)
LSS managed network migration - disconnection charge	\$0 (1 Jan 2008 to 31 Jul 2009)

The ACCC notes that it will more fully consider the consistency between the pricing approaches for different declared services in its upcoming review of all declared fixed network services.²⁷⁸

²⁷⁸ ACCC, *Fixed services review - a second position paper*, April 2007, p. 28.

Appendix 1: Line Sharing Service (LSS) description

The High Frequency Unconditioned Local Loop Service is the use of the non-voiceband frequency spectrum of unconditioned communications wire (over which wire an underlying voiceband PSTN service is operating) between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at, or associated with, a customer access module and located on the end-user side of the customer access module.

Definitions

Where words or phrases used in this declaration are defined in the *Trade Practices Act 1974* or the *Telecommunications Act 1997*, they have the same meaning given in the relevant Act.

In this Appendix:

boundary of a telecommunications network is the point ascertained in accordance with section 22 of the *Telecommunications Act 1997*;

communications wire is a copper or aluminium wire forming part of a public switched telephone network;

customer access module is a device that provides ring tone, ring current and battery feed to customers' equipment. Examples are Remote Subscriber Stages, Remote Subscriber Units, Integrated Remote Integrated Multiplexers, Non-integrated Remote Integrated Multiplexers and the customer line module of a Local Switch;

public switched telephone network is a telephone network accessible by the public providing switching and transmission facilities utilising analogue and digital technologies.

voiceband PSTN service is a service provided by use of a public switched telephone network and delivered by means of the voiceband portion of the frequency spectrum of a metallic line.

Appendix 2: Legislative background

The access regime

Part XIC of the TPA sets out a telecommunications access regime. The ACCC may determine that particular carriage services and related services are declared services. Once a service is declared, carriage service providers (CSPs) are required to comply with standard access obligations (SAOs) in relation to supply of the declared service. The SAOs facilitate the provision of access to declared services by service providers in order that service providers can provide carriage services and/or content services. In addition to its SAOs, a carrier, CSP or related body must not prevent or hinder access to a declared service.

Maintaining, varying or revoking an existing declaration

Section 152ALA of the *Trade Practices Act 1974* ('the TPA') requires the ACCC to review each declaration within the year preceding its expiry date.

The purpose of the review, as set out in section 152ALA(7) of the TPA, is to determine whether or not the expiry date for the declaration should be extended, whether the declaration should be allowed to expire, whether or not the declaration should be varied or revoked or if a new declaration should be made. An extension to an expiry date, or the expiry date for a new declaration, may not be for a period exceeding five years.

Pursuant to section 152ALA of the TPA, the ACCC must:

- hold a public inquiry in accordance with Part 25 of the Telecommunications Act 1997 on whether to extend the expiry date for the declaration, vary or revoke the declaration, or allow the declaration to expire (with or without a new declaration being made)
- prepare and publish a report setting out the ACCC's findings.

The ACCC's powers to extend the expiry date for a declaration, vary or revoke a declaration, or allow a declaration to expire (with or without a new declaration being made), are set out in sections 152AL, 152ALA and 152AO of the TPA. In exercising these powers, the ACCC is required to consider the effect on the LTIE of carriage services and services provided by means of carriage services.

The ACCC's approach to the LTIE test

The ACCC must decide whether declaring the service would promote the LTIE of carriage services, or of services supplied using carriage services ('listed services').

Section 152AB of the TPA provides that, in determining whether declaration promotes the LTIE, regard must be had only to the extent to which declaration is likely to result in the achievement of the following objectives.

- promoting competition in markets for listed services

- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.

Section 152AB also provides further guidance in interpreting these objectives.

The three objectives are discussed below.

Promoting competition

Subsections 152AB(4) and (5) provide that, in interpreting this objective, regard must be had to, but is not limited to, the extent to which the arrangements will remove obstacles to end-users gaining access to listed services. The Explanatory Memorandum to Part XIC of the TPA states that:

...it is intended that particular regard be had to the extent to which the...[declaration]... would enable end-users to gain access to an increased range or choice of services.²⁷⁹

This criterion requires the ACCC to make an assessment of whether or not declaration would be likely to promote competition in the markets for listed services.

The concept of competition is of fundamental importance to the TPA and has been discussed many times in connection with the operation of Part IIIA, Part IV, Part XIB and Part XIC of the TPA.

In general terms, competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The Trade Practices Tribunal (now the Australian Competition Tribunal) stated that:

In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate.²⁸⁰

Competition can provide benefits to end-users including lower prices, better quality and a better range of services over time. Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms profitably to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

The establishment of a right for third parties to negotiate access to certain services on reasonable terms and conditions can operate to constrain the use of market power that could be derived from the control of these services. Accordingly, an access regime such as Part IIIA or Part XIC addresses the *structure* of a market, to limit or reduce

²⁷⁹ Trade Practices Amendment (Telecommunications) Act 1997 (Cth) Explanatory Memorandum.

²⁸⁰ Re Queensland Co-operative Milling Association Ltd; Re Defiance Holdings Ltd (1976) ATPR 40-012, 17,245.

the sources of market power and consequent anti-competitive conduct, rather than directly regulating conduct which may flow from its use, which is the role of Part IV and Part XIB of the TPA. Nonetheless, in any given challenge to competition, both Parts XIB (or IV) and XIC may be necessary to address anti-competitive behaviour.

To assist in determining the impact of potential declaration on downstream markets, the ACCC will first need to identify the relevant market(s) and assess the likely effect of declaration on competition in each market.

Section 4E of the TPA provides that the term 'market' includes a market for the goods or services under consideration and any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The ACCC's approach to market definition is discussed in its *Merger Guidelines*, June 1999 and is also canvassed in its information paper, *Anti-competitive conduct in telecommunications markets*, August 1999.

The second step is to assess the likely effect of declaration on competition in each relevant market. As noted above, subsection 152AB(4) requires that regard must be had to the extent to which declaration will remove obstacles to end-users gaining access to listed services.

The ACCC considers that denial to service providers of access to necessary upstream services on reasonable terms is a significant obstacle to end users gaining access to services. In this regard, declaration can remove such obstacles by facilitating entry by service providers, thereby providing end users with additional services from which to choose. For example, access to a mobile termination service may enable more service providers to provide fixed to mobile calls to end-users. This gives end-users more choice of service providers.

Where existing market conditions already provide for the competitive supply of services, the access regime should not impose regulated access.²⁸¹ This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulation will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users that outweigh any costs of regulation.

In the context of considering whether declaration will promote competition, it is therefore appropriate to examine the impact of the proposed service description on each relevant market, and compare the state of competition in that market with and without declaration. In examining the market structure, the ACCC considers that competition is promoted when market structures are altered such that the exercise of market power becomes more difficult; for example, because barriers to entry have been lowered (permitting more efficient competitors to enter a market and thereby constrain the pricing behaviour of the incumbents) or because the ability of firms to raise rivals' costs is restricted.²⁸²

²⁸¹ Trade Practices Amendment (Telecommunications) Act 1997 (Cth) Explanatory Memorandum.

²⁸² See also *Re Sydney International Airport* [2000] ACompT 1 at paragraph 106 for discussion on when competition is promoted.

Any-to-any connectivity

Subsection 152AB(8) provides that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, or a similar service, with other end-users whether or not they are connected to the same network. The reference to ‘similar’ services in the TPA enables this objective to apply to services with analogous, but not identical, functional characteristics, such as fixed and mobile voice telephony services or Internet services which may have differing characteristics.

The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users.²⁸³ When considering other types of services (such as carriage services that are inputs to an end-to-end service or distribution services such as the carriage of pay television), the ACCC considers that this criterion will be given less weight compared to the other two criteria.

Efficient use of, and investment in, infrastructure

Subsections 152AB(6) and (7) provide that, in interpreting this objective, regard must be had to, but not limited to, the following:

- whether it is technically feasible for the services to be supplied and charged for, having regard to:
- the technology that is in use or available
- whether the costs that would be involved in supplying, and charging for, the services are reasonable
- the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks
- the legitimate commercial interests of the supplier or suppliers of the service, including the ability of the supplier or suppliers to exploit economies of scale and scope
- the incentives for investment in:
 - (i) the infrastructure by which the services are supplied; and
 - (ii) any other infrastructure by which the services are, or are likely to become, capable of being supplied: in determining the extent to which a particular thing is likely to encourage the efficient investment in other infrastructure, the ACCC must have regard to the risks involved in making the investment.

These matters are interrelated. In many cases, the LTIE may be promoted through the achievement of two or all of these criteria simultaneously. In other cases, the achievement of one of these criteria may involve some trade-off in terms of another of the criteria, and the ACCC will need to weigh up the different effects to determine

²⁸³ Trade Practices (Telecommunications) Amendment Act 1997 (Cth) Explanatory Memorandum.

whether declaration promotes the LTIE. In this regard, the ACCC will interpret long-term to mean the period of time necessary for the substantive effects of declaration to unfold.

Economic efficiency has three components.

- *Productive efficiency* refers to the efficient use of resources within each firm such that all goods and services are produced using the least cost combination of inputs.
- *Allocative efficiency* refers to the efficient allocation of resources across the economy such that the goods and services that are produced in the economy are the ones most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs.
- *Dynamic efficiency* refers to the efficient deployment of resources between present and future uses such that the welfare of society is maximised over time. Dynamic efficiency incorporates efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques.

The ACCC will need to ensure that the access regime does not discourage investment in networks or network elements where such investment is efficient. The access regime also plays an important role in ensuring that existing infrastructure is used efficiently where it is inefficient to duplicate investment in existing networks or network elements.

The technical feasibility of supplying and charging for particular services

This incorporates a number of elements, including the technology that is in use or available, the costs of supplying, and charging for, the services and the effects on the operation of telecommunications networks.

In many cases, the technical feasibility of supplying and charging for particular services given the current state of technology may be clear, particularly where there is a history of providing access. The question will be more difficult where there is no prior access, or where conditions have changed. Experience in other jurisdictions, taking account of relevant differences in technology or network configuration, will be helpful. Generally the ACCC will look to an access provider to demonstrate that supply is not technically feasible.

The legitimate commercial interests of the supplier or suppliers, including the ability of the supplier to exploit economies of scale and scope

A supplier's legitimate commercial interests encompass its obligations to the owners of the firm, including the need to recover the cost of providing services and to earn a normal commercial return on the investment in infrastructure. The ACCC considers that allowing for a normal commercial return on investment will provide an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

A significant issue relates to whether or not capacity should be made available to an access seeker. Where there is spare capacity within the network, not assigned to current or planned services, allocative efficiency would be promoted by obliging the owner to release capacity for competitors.

Paragraph 152AB(6)(b) also requires the ACCC to have regard to whether the access arrangement may affect the owner's ability to realise economies of scale or scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise from a production process in which it is less costly in total for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce each of the products.

Potential effects from access on economies of scope are likely to be greater than on economies of scale. A limit in the capacity available to the owner may constrain the number of services that the owner is able to provide using the infrastructure and thus prevent the realisation of economies of scope associated with the production of multiple services. In contrast, economies of scale may simply result from the use of the capacity of the network and be able to be realised regardless of whether that capacity is being used by the owner or by other carriers and service providers. Nonetheless, the ACCC will assess the effects of the supplier's ability to exploit both economies of scale and scope on a case-by-case basis.

The impact on incentives for investment in infrastructure

Firms should have the incentive to invest efficiently in infrastructure. Various aspects of efficiency have been discussed already. It is also important to note that while access regulation may have the potential to diminish incentives for some businesses to invest in infrastructure, it also ensures that investment is efficient and reduces the barriers to entry for other (competing) businesses or the barriers to expansion by competing businesses.

There is also a need to consider the effects of any expected disincentive to investment from anticipated increases in competition to determine the overall effect of declaration on the LTIE. The ACCC will be careful to ensure that services are not declared where there is a risk that incentives to invest may be dampened, such that there is little subsequent benefit to end-users from the access arrangements.

Appendix 3: Submissions to the Inquiry

Submissions to the Discussion Paper

AAPT/PowerTel

Adam Internet

Agile

Amcom (confidential only)

Chime

Competitive Carriers Coalition (CCC)

Consumers' Telecommunications Network (CTN)

Network Technology

Optus

Telstra (2 submissions)

Submissions to the Draft Decision

AAPT/PowerTel

Adam Internet

Agile

Competitive Carriers Coalition (CCC)

Consumers' Telecommunications Network (CTN)

Network Technology

Telstra (2 submissions)