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Commission

Assessment of Telstra's ULLS and LSS monthly charge undertakings

Final Decision

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Abbreviations

1999 PSTN undertaking assessment	ACCC, *A report on the assessment of Telstra's undertaking for the Domestic PSTN Originating and Terminating Access services*, July 2000.
2003 Final Determinations	ACCC, *Assessment of Telstra's undertakings for PSTN, ULLS and LCS—final decision*, December 2004.
AAPT	AAPT Limited
ACCC	Australian Competition and Consumer Commission
Act	*Trade Practices Act 1974*
AD	Access Deficit
ADC	Access Deficit Contribution
CAM	Customer access module
CAN	Customer access network
CAPM	Capital asset pricing model
CCC	Competitive Carriers Coalition
CMUX	Customer multiplexer
COLR	Carrier of last resort
CRAI	CRA International
DA	Distribution area
Discussion paper(s)	ACCC, *Telstra's undertakings for the Unconditioned local loop service—Discussion paper*, March 2005. ACCC, *Telstra's undertakings for the Line sharing service—Discussion paper*, March 2005.
DSL	Digital subscriber line
ERP	Equity risk premium
ESA	Exchange service area
IDD	International Direct Dial
IEN	Inter-exchange network
IRIM	Integrated remote integrated multiplexer

LAN	Local area network
LAS	Local access switch
LCS	Local Carriage Service
LSS	Line sharing service
LTIE	Long Term Interests of End–users
Macquarie	Macquarie Telecom Pty Ltd
MC	Monte Carlo
MRP	Market risk premium
NECG	Network Economics Consulting Group
n/e/r/a	NERA Economic Consulting (formerly National Economic Research Associates)
NTP	Network termination point
NZCC	New Zealand Commerce Commission
Optus	SingTel Optus Pty Ltd
PIE	PSTN Ingress and Egress model
POI	Point of interconnection
PowerTel	PowerTel Limited
Primus	Primus Telecommunications Pty Ltd
PSTN	Public Switched Telephone Network
PSTN O/T	PSTN Originating and Terminating Access Services
RAF	Regulatory accounting framework
RBOC	Regional Bell Operating Company
RIM	Remote integrated multiplexer
RSS/RSU	Remote switching stage/ remote switching unit
SAOs	Standard Access Obligations
STD	Subscriber Trunk Dialling
STS	Standard telephone service

TCAM	Telstra Customer Access Module
Telstra	Telstra Corporation Limited
Telstra service	Service of a particular technical attribute as specified by Telstra in the undertaking
TS	Transit switch
TELRIC	Total element long-run incremental cost
Tribunal	Australian Competition Tribunal
TSLRIC	Total service long-run incremental cost
TSLRIC+	Total service long-run incremental cost plus indirect costs
ULLS	Unconditioned Local Loop Service
Undertakings	Telstra's ULLS and LSS access undertakings lodged with the ACCC on 13 December 2004.
USF	Universal Service Fund
USO	Universal Service Obligation
VoIP	Voice over IP
WACC	Weighted average cost of capital

Glossary

Access Provider	Carrier or carriage service provider who supplies declared services to itself or other persons — see s. 152AR of the Act.
Access Seeker	Service provider who makes, or proposes to make, a request for access to a declared service under s. 152AR of the Act.
Customer access network	The network which enables the connection of telephones and other customer premises equipment to switching technology. It consists of a network of conduits and pipes in the ground with a mixture of cables containing copper wires and optical fibres. It has two parts – the distribution network and the feeder network.
Distribution network	That part of the customer access network connecting the distribution point (typically a pillar) to the network termination point.
Exchange	A generic term for a major node in an exchange service area (e.g. an IRIM, RSS/RSU, LAS, TS).
Feeder network	That part of the customer access network connecting the exchange to the distribution point (typically a pillar).
Integrated remote integrated multiplexer	This device consists of a protective housing, cable and optical fibre terminating strips, and multiplexing equipment, erected in street-based housing. 'Integrated' means that the housing contains multiplexers that enable different services to be carried over the same transmission cable (i.e. special services, telephone services, public telephone services, ISDN services are all carried over the same transmission cable/fibre). The transmission protocol is integrated with the telephone exchange software.
Inter-exchange network	The network connecting exchanges to each other.
Local access switch	This equipment provides ring current, dial

	tone and battery feed to end-users, as well as switching calls locally to other local access switches. It also provides number analysis for call routing and call charge recording, and enhanced (or supplementary) services such as call waiting and call diversion.
Multiplexer	A device that combines two or more signals into a single composite data stream for transmission on a single channel.
Network termination point	The termination point of the public switched telephone network at the end-user's premises. Cabling beyond this point is customer wiring.
Pre-selection	Function that enables an end-user or service provider to select a preferred carrier or carriage service provider for a certain type of call (e.g. long distance calls).
Remote subscriber stage	A customer access module of the LM Ericsson AXE telephone switching exchange located in buildings remote from the group switching function.
Remote subscriber unit	A customer access module of the Alcatel S12 telephone switching exchange located in buildings remote from the group switching function.
Service provider	Defined in s. 86 of the *Telecommunications Act 1997*. Means a carriage service provider or a content service provider.
Total service long run incremental cost	See Australian Competition and Consumer Commission, *Access Pricing Principles – Telecommunications: A guide*, July 1997.

Decision on Telstra's ULLS monthly charge undertaking

The ACCC has given consideration to the ULLS ordinary access undertaking submitted on 13 December 2004. The ACCC has considered the undertaking pursuant to the matters set out in section 152BV(2) of the Act. The ACCC is not satisfied that the terms and conditions specified in the undertaking are reasonable. Accordingly, as set out in 152BV(2), the ACCC must not accept the undertakings. The ACCC's decision is to reject the ULLS monthly charge undertaking that was submitted by Telstra on 13 December 2004. Pursuant to section 152BU(4) this decision paper constitutes written notice of that decision to reject the undertaking and also sets out the reasons for the ACCC's decision to reject the undertaking.

Decision on Telstra's LSS monthly charge undertaking

The ACCC has given consideration to the LSS ordinary access undertaking submitted on 13 December 2004. The ACCC has considered the undertaking pursuant to the matters set out in section 152BV(2) of the Act. The ACCC is not satisfied that the terms and conditions specified in the undertaking are reasonable. Accordingly, as set out in 152BV(2), the ACCC must not accept the undertakings. The ACCC's decision is to reject the LSS monthly charge undertaking that was submitted by Telstra on 13 December 2004. Pursuant to section 152BU(4) this decision paper constitutes written notice of that decision to reject the undertaking and also sets out the reasons for the ACCC's decision to reject the undertaking.

Summary

Telstra Corporation Limited (Telstra) lodged access undertakings (undertakings) with the Australian Competition and Consumer Commission (ACCC) on 13 December 2004. The undertakings specify certain terms and conditions which Telstra undertakes to meet its standard access obligations (SAOs) in respect of the unconditioned local loop service (ULLS) and the line sharing service (LSS).

The four undertakings relate predominantly to the price of supply. Two undertakings, one for each service, relate to the monthly charge for the services, while the other two relate to the connection/disconnection charge for each service. The ACCC issued a discussion paper in March and received a number of submissions on all four undertakings. This decision, however, is only in relation to the monthly charge undertakings.

The ACCC is releasing a separate (draft) report on its assessment of Telstra's connection/disconnection undertakings for these services.

Telstra's decision to submit these undertakings follows from amendments to the *Trade Practices Act 1974* (the Act) in 2002 which encourage the lodgement of undertakings as the main means of addressing access to declared services.[1] In addition, the lodgement of these 2004 undertakings follows a series of decisions by the ACCC on ULLS and LSS monthly charges since 2003. First, the ACCC made its model price terms and conditions determination relating to the PSTN O/T, LCS and

[1] See Explanatory Memorandum, Telecommunications Competition Bill 2002, p. 1.

ULLS (the core services) in 2003.[2] In reaching this determination, the ACCC undertook extensive work on the assessment of appropriate price terms and conditions for the supply of the core services and it consulted widely with interested parties on all relevant issues. Second, the ACCC made a final decision to reject the LSS undertaking submitted on 1 September 2003, in August 2004[3] and made a draft decision to reject the ULLS undertaking submitted on 14 November 2003, in October 2004.[4]

After an extensive process involving public consultation and the release of a draft decision in August 2005, the ACCC has now concluded that Telstra's ULLS and LSS undertakings submitted in November 2004 in overall terms do not meet the reasonableness criteria and should be rejected.

Under Part XIC of the Act, the ACCC must accept or reject the undertakings. The process the ACCC follows to assess the undertakings is open and public, allowing parties to express their views and provide relevant information to the ACCC.

The ACCC cannot accept an undertaking unless it has considered the matters set out in section 152BV of the Act. This requires the ACCC to be satisfied that the terms and conditions specified in the undertaking are reasonable.

In determining whether particular terms and conditions are reasonable the ACCC must have regard to:[5]

- whether the terms and conditions promote the long-term interests of end-users (LTIE)
- Telstra's legitimate business interests
- the interests of persons who have rights to use the declared service
- 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, a telecommunications network or a facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

Following the public consultation process, the ACCC released a draft decision to reject Telstra's ULLS and LSS Undertakings. Submissions on the draft decision were called for and received from several interested parties[6]. After considering these submissions, the ACCC's final decision is to reject Telstra's undertakings.

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2 ACCC, *Final Determinations for Model Price Terms and Conditions for the PSTN, ULLS and LCS Services*, October 2003.

3 ACCC, *A Final Report on the Assessment of Telstra's Undertaking for the Line Sharing Service*, August 2004.

4 ACCC, *Assessment of Telstra's Undertakings for PSTN, ULLS and LCS - Draft Decision*, October 2004. Telstra withdrew the ULLS undertaking following the ACCC's draft determination to reject it and accordingly the ACCC made no final decision on that undertaking.

5 Section 152AH of the Act.

6 These submissions to the draft report have also been publicly released on the ACCC's website.

The ACCC is not satisfied that the terms and conditions specified in the undertaking are reasonable. In particular, the ACCC is not satisfied that the price terms and conditions are reasonable.

The ACCC's findings in relation to its final view to reject the ULLS undertaking are as follows:

- The ACCC considers that recovery of ULLS specific costs over a broader range of services is appropriate and consistent with the relevant statutory criteria. The ACCC has not at this stage come to a definitive view on the relevant broadened base, as on any reasonable definition of such a base the ULLS specific cost component of the ULLS monthly charge would be significantly below Telstra's claimed amount.
- Even if it were found appropriate that ULLS specific costs should continue, at least for the time being, to be recovered only from ULLS lines, due to Telstra's revised demand estimates Telstra's proposed charges for this component would be unreasonably high relative to what may have previously been considered acceptable by the ACCC in its previous ULLS assessment.[7]
- Telstra's claimed network costs using estimates created by the PIE II model are above those the ACCC would consider to represent the conservative upper bound of efficient costs, and therefore prices based on these claimed costs are rejected as being inconsistent with the relevant statutory criteria.
- The ADC component does not establish prices consistent with the relevant statutory criteria and the ADC component is therefore rejected.
- The IEN cost component does not establish prices consistent with the relevant statutory criteria and the IEN cost component is therefore rejected.

The ACCC's conclusions in relation to its final view to reject the LSS undertaking are as follows:

- The ACCC considers that recovery of LSS specific costs over a broader range of services is appropriate and consistent with the relevant statutory criteria. The ACCC has not at this stage come to a definitive view on the relevant broadened base, 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.
- 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 would be unreasonably high.[8]
- While Telstra has not at this stage included a claim for an ADC component in the LSS price, it reserved the right to do so at a later stage. However, the ACCC considers that prices imposing an ADC component would not be

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[7] ACCC, *Assessment of Telstra's Undertakings for PSTN, ULLS and LCS - Draft Decision*, October 2004.

[8] See also: ACCC, *A Final Report on the Assessment of Telstra's Undertaking for the Line Sharing Service*, August 2004.

consistent with the relevant statutory criteria and would therefore be rejected in the event that Telstra made a claim in this regard.

- While Telstra has not at this stage included a claim for an IEN cost component in the LSS price, it reserved the right to do so at a later stage. However, the ACCC considers that prices imposing an IEN cost component would no be consistent with the relevant statutory criteria and would therefore be rejected in the event that Telstra made a claim in this regard.
- The recovery of line related costs in the LSS monthly charges at this stage is inconsistent with the relevant statutory criteria given current prices for other services provided by Telstra over the CAN.

1. Introduction

The unconditioned local loop service (ULLS) is a service for access to unconditioned cable, usually a copper wire pair, between an end user and a telephone exchange. The ULLS essentially gives an access seeker the use of the copper pair without any dial tone or carriage service. This allows the access seeker to use its own equipment in an exchange to provide a range of services, including traditional voice services and high speed internet access, to the end-user.

Line sharing refers to a situation where two separate telecommunications carriers or service providers supply two different services to the same end user over one copper pair. Line sharing uses the fact that different telecommunications services can be supplied on different frequencies on the same wire. In particular, the line sharing service (LSS) involves the access provider supplying a PSTN voice service, while an access seeker provides a different service (usually broadband internet access) over a higher frequency part of the line.

The ULLS and LSS have both been "declared" by the Australian Competition and Consumer Commission (ACCC) under Part XIC of the *Trade Practices Act 1974* (the Act). The ULLS was declared in July 1999,[9] while the LSS was declared in August 2002.[10]

Declaration of these services has two important consequences. Firstly, Telstra is required to supply these services to all service providers upon request. Secondly, if Telstra and a service provider cannot agree on the terms and conditions of supply, one of them can notify the ACCC of a dispute. The ACCC can then arbitrate and resolve the dispute.

To reduce the scope for disputes and therefore the need for the ACCC to conduct arbitrations, Telstra can offer the ACCC an undertaking setting out particular terms and conditions of supply. If the ACCC accepts the undertaking, then it is prevented from making an arbitration determination that is inconsistent with the undertaking.

Telstra lodged access undertakings for the ULLS and LSS with the ACCC on 13 December 2004. The undertakings specify certain terms and conditions upon which Telstra undertakes to meet its standard access obligations (SAOs) for the ULLS and LSS. Telstra lodged four separate undertakings—for ULLS monthly charges, for ULLS connection charges, for LSS monthly charges and for LSS connection and disconnection charges.

This report contains the ACCC's final decision to reject the ULLS monthly charge undertaking and LSS monthly charge undertaking. The ACCC's draft decision on the undertakings for ULLS connection charges and LSS connection and disconnection charges will be published separately.

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9 ACCC, *Declaration of Local Telecommunications Services*, July 1999.

10 ACCC, *Line Sharing Service – Final Decision on Whether or not a Line Sharing Service Should be Declared Under Part XIC of the Trade Practices Act 1974*, August 2002.

2. Background

2.1. Declaration and the regulatory framework

The ULLS and LSS have been declared under Part XIC of the Act – the ULLS in 1999, the LSS in 2002.

Once a service is declared, carriers and carriage service providers supplying the declared service to themselves or others are subject to the SAOs. These obligations constrain the manner in which those carriers and carriage service providers can conduct themselves in relation to supply of the declared service.

Section 152AR of the Act sets out the SAOs applying to those carriers and carriage service providers supplying the declared service to themselves or others. In summary,[11] if requested by a service provider, the carrier/carriage service provider is required to:

- supply the declared service
- take all reasonable steps to ensure that the declared service supplied to the service provider is of equivalent technical and operational quality as that which the carrier/carriage service provider is supplying to itself
- take all reasonable steps to ensure that the fault detection, handling and rectification which the service provider receives in relation to the declared service is of equivalent technical and operational quality as that provided by the carrier/carriage service provider to itself
- permit interconnection of its facilities with those of the service provider
- provide particular billing information to the service provider.

The terms and conditions upon which a carrier/carriage service provider is to comply with these obligations are as agreed between the parties. In the event that they cannot agree, one of them can notify the ACCC of an access dispute under s152CM of the Act. Once notified, the ACCC can arbitrate and make a determination which resolves the dispute. The ACCC's determination need not, however, be limited to the matters specified in the dispute notification. It can deal with any matter relating to access by the service provider to the declared service.[12]

The Act enables a carrier/carriage service provider to resolve potentially contentious issues with the ACCC outside the arbitral process. It can do this by giving the ACCC an access undertaking under s152BS of the Act, setting out the terms and conditions on which it proposes to comply with particular SAOs.

If accepted by the ACCC, the undertaking becomes binding on the carrier/carriage service provider. Hence if a carrier/carriage service provider breaches the undertaking, the Federal Court can make an order requiring compliance with the undertaking, the payment of compensation, or any other order that it thinks fit. In addition, in accepting an undertaking, the ACCC is limiting its flexibility in the

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[11] There are some exceptions to these obligations. These are set out in s. 152AR, and in any exemption issued under s. 152AS or s. 152AT of the Act.

[12] See ss. 152CP(2).

context of arbitrating access disputes. Once an undertaking is in operation, the ACCC must not make an arbitral determination that is inconsistent with the undertaking.[13]

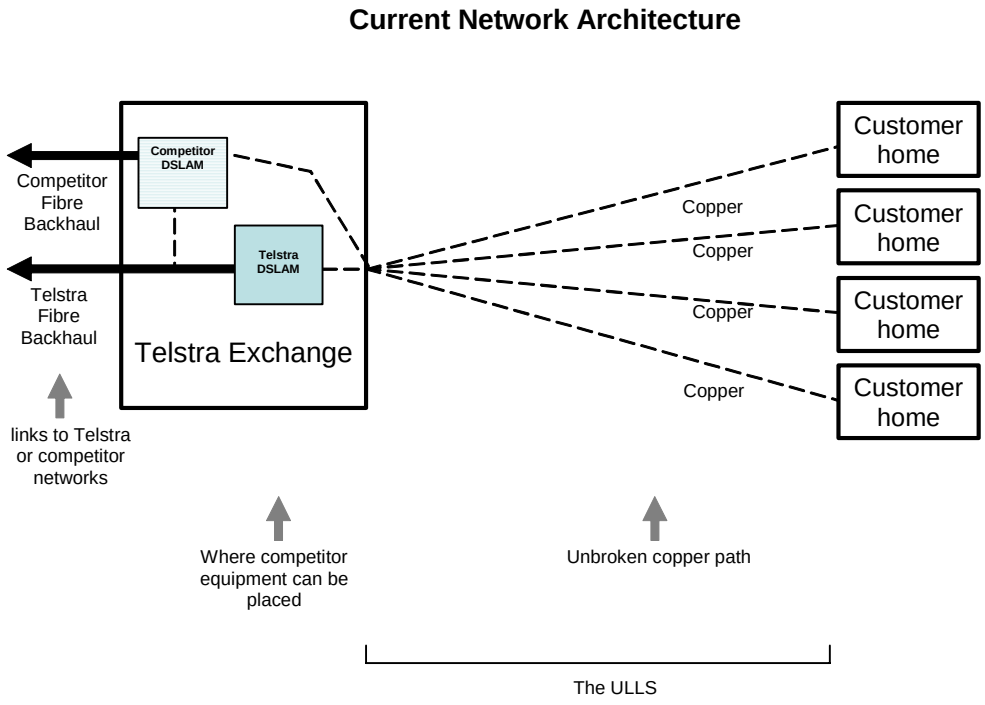
2.2. The declared services

2.2.1. Unconditioned Local Loop Service

The ULLS involves the use of unconditioned cable, primarily copper pairs, between end-users and a telephone exchange, where the unconditioned cable terminates.

Under Telstra's customer access network (CAN) architecture, customers are connected to the broader network by cables, which run from a customer's premises to what is known as Customer Access Module (CAM) equipment. CAM equipment includes remote switching units or stages (RSUs/RSSs), remote (and integrated remote) integrated multiplexers (RIMs/IRIMs) or newer generation remote customer multiplexers (C-MUXs). The CAM equipment can then be connected (directly, or by means of other CAM equipment) to a LAS and/or a data/IP network. Voice traffic is currently routed to the LAS for carriage using a circuit switched network, while data traffic is routed to a data/IP network (not separately shown below). This is illustrated in Figure 2.2.1. In some areas, notably in CBDs, customers are directly connected to a LAS which effectively serves as the CAM.

Figure 2.2.1 Use of the ULLS



In the above figure, the ULLS refers to the unconditioned twisted copper pairs that connect a customer's premises to the nearest Telstra Exchange.

Telstra, as the predominant supplier of this service, has ownership of the copper CAN located throughout Australia.

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[13] See ss. 152CQ(5).

The declared ULLS is used by access seekers to connect their own networks to existing infrastructure and deliver new and innovative high-speed and data-based services to end-users more efficiently. It can also potentially be used to provide voice services more efficiently using voice over IP and DSL technologies. Possible services include high speed Internet access, 'tele-working', distance learning, video-on-demand, remote local area network (LAN) access and other multimedia and data applications, as well as traditional local, STD and IDD call services in competition with Telstra.

2.2.2. Line Sharing Service

Line sharing refers to a situation where two separate carriers provide separate services over a single metallic pair (or 'line'). A metallic pair is capable of providing a broad range of services by utilising the full spectrum of the line. Traditionally, only 3.1 kHz, which is a relatively small part of the useable spectrum of a metallic pair of several MHz, is used to provide voice services. Until recently, the rest of the spectrum remained unused. With the development of xDSL technology,[14] however, the remaining part of the spectrum can 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 data services through the use of its own xDSL technology. This is also sometimes referred to as spectral unbundling or spectrum sharing.

The LSS considered during this assessment refers to a specific form of line sharing. The ACCC has adopted the following service description:

> The High Frequency Unconditioned Local Loop Service is the use of the non-voice band frequency spectrum of an 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.

Hence, a LSS would involve the access provider providing a voiceband PSTN service to an end-user, whilst providing access to another carrier (the access seeker) to simultaneously provide services to the same end-user over the high-frequency portion of the unconditioned local loop. For example, if Telstra is the access provider, it could deliver voice services to end-users, while a second carrier could simultaneously provide high-speed data services (such as ADSL) over the same line.

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[14] 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 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.

3. Summary of the undertakings

3.1. Terms and conditions of the undertakings

In assessing an undertaking, it is necessary to form a view about its terms and conditions.

Telstra has lodged access undertakings with the ACCC specifying the price-related terms and conditions, and limited non-price terms, upon which it undertakes to meet its SAOs to supply the ULLS and the LSS. These undertakings were lodged on 13 December 2004. However, public versions of Telstra's supporting submissions were not provided to the ACCC until 2 March 2005, significantly delaying the commencement of public consultations.

There are four undertakings in total. Two undertakings relate to the monthly ongoing charges for provision of the ULLS and the LSS respectively. Two further undertakings relate to proposed connection charges for the ULLS and the LSS and will be assessed separately. If accepted, the undertakings would apply from the date of acceptance until 30 June 2006.

3.2. Unconditioned Local Loop Service undertakings

3.2.1. Monthly Charge Undertaking

Telstra's proposed monthly ULLS charges relate only to providing a RSS/RSU connected ULLS in 2004-05 and 2005-06. Table 3.2.1 outlines Telstra's proposed monthly charges.

Table 3.2.1 ULLS Charges

Band 1	Band 2	Band 3	Band 4
$13 per month	$22 per month	$40 per month	$100 per month

Telstra's proposed prices are uniform across 2004-05 and 2005-06.

Telstra's undertaking submits that the proposed prices should be accepted, primarily because:

- they are reflective of current commercial arrangements
- they are below the prices Telstra could charge if it applied adjustment mechanisms previously endorsed by the ACCC
- the proposed prices are significantly below Telstra's estimates of efficient costs, and are therefore a generous offer.[15]

[15] Telstra, *Public Version of Telstra's Submission in Support of the ULLS Monthly Charges Undertaking Dated 13 December 2004*, 2 March 2005, p. 4.

3.2.2. Telstra claimed ULLS efficient costs

Telstra's estimated efficient costs of provision of the ULLS for 2004-05 and 2005-06 are outlined in Table 3.2.2 below.

Table 3.2.2 Telstra's estimated ULLS efficient costs

		Network Costs ($)	ULLS specific costs ($)	ADC ($)	IEN costs ($)	Total ($)
2004-05	**Band 1**	4.11	15.36	3.18	15.58	38.23
	Band 2	14.89	15.36	3.18	10.60	44.03
	Band 3	30.33	15.36	3.18	15.28	64.15
	Band 4	160.05	15.36	3.18	66.99	245.58
2005-06	**Band 1**	4.09	15.36	2.76	14.90	37.11
	Band 2	15.00	15.36	2.76	10.44	43.56
	Band 3	30.29	15.36	2.76	14.73	63.14
	Band 4	159.05	15.36	2.76	63.57	240.74

Briefly, these cost components can be defined as follows:

- Network costs – the estimated costs for the provision of a line within a given Band according to Telstra's PIE II model.
- ULLS specific costs – the overhead costs associated with providing the ULLS service to access seekers. Telstra's claimed costs involve distributing these costs over the expected demand for ULLS lines.
- ADC – an Access Deficit Contribution, measured by Telstra as the average shortfall in contributions it claims it would otherwise have received from the ULLS line.
- IEN costs – a cost estimate based on the revenue Telstra claims it would otherwise have received from traffic flowing across its IEN to and from that ULLS line, on the presumption that its IEN could be bypassed but that it is forced to maintain the IEN in order to fulfil any future carrier of last resort obligations.

The ACCC's conclusions in relation to each of Telstra's claimed components of efficient costs are set out in sections 6. The ACCC's underlying analysis leading to its conclusions in relation to ULLS efficient costs is further set out in Appendix A through Appendix E.

3.2.3. Non-price terms

Telstra has amended the network modernisation provisions in this undertaking as a result of the ACCC's previously expressed concerns. Telstra considers that the non-price terms and conditions as set out in the undertaking are consistent with both the service description for the declared ULLS, and with the terms and conditions of its access agreements with its wholesale customers.

3.3. Line Sharing Service undertakings

3.3.1. Monthly Charge Undertaking

Telstra has proposed to charge $9 (exclusive of GST) per LSS per month for 2004-05 and 2005-06. This charge is uniform across the period.

Telstra's undertaking submits that the proposed price should be accepted as:

- it is consistent with current commercial arrangements
- the proposed prices are significantly below Telstra's estimates of efficient costs, and are therefore a generous offer.[16]

Telstra's estimated efficient costs of supplying the LSS for 2004-05 and 2005-06 are outlined in Table 3.3.1 below.

Table 3.3.1 Telstra's estimated LSS efficient costs

	2004-05	**2005-06**
LSS specific costs ($)	10.98	10.98
Shared Network Costs ($)	0.77	0.77
Total ($)	11.75	11.75

Telstra's undertaking documents outline amendments to the non-price terms and conditions relative to its previously lodged LSS undertaking on 1 September 2003. These amendments relate to:

- network modernisation provisions to clarify that they do not over-ride certain other terms and conditions of supply, as a result of the ACCC's previously expressed concerns
- provisions regarding compliance with the Network Deployment Rules, as a result of the ACCC's previously expressed concerns
- the inclusion of a requirement that an underlying voice service must be in operation.

[16] Telstra, *Public Version of Telstra's Submission in Support of the SSS Monthly Charges Undertaking dated 13 December 2004*, 2 March 2005, p. 4.

4. Legislative Background

4.1. Form and contents of an undertaking

Section 152BS of the Act provides that an access undertaking is a written document given to the ACCC under which the relevant carrier or provider undertakes to comply with the terms and conditions specified in the undertaking in relation to the applicable SAOs.

Section 152BS sets out that an undertaking may be one of the following types:

- an undertaking containing terms and conditions that are specified in the undertaking
- an undertaking where the terms and conditions are specified by adopting a set of model terms and conditions set out in the telecommunications access code, as in force at that time.[17]

Telstra's undertaking falls into the first category.

4.2. Criteria for acceptance of an undertaking

Section 152BV sets out the matters which the ACCC must be satisfied before it can accept the undertaking. It applies where an ordinary access undertaking is given to the ACCC and the undertaking does not adopt a set of model terms and conditions set out in the telecommunications access code. Telstra's undertaking is an ordinary access undertaking.

Each of the matters in s. 152BV are explained in turn below.

4.2.1. Public process

Sub-section 152BV(2)(a) of the Act provides that the ACCC must not accept an undertaking unless:

- the ACCC has published the undertaking and invited people to make submissions on the undertaking
- it has considered any submissions that were received within the time limit specified by the ACCC when it published the undertaking.

ACCC's Discussion Paper

In accordance with sub-section 152BV(2)(a) of the Act, the ACCC published the Undertakings and, at the same time, released its *Telstra's Undertaking for the Unconditioned Local Loop Service – Discussion Paper*[18] (the "Discussion Paper"), inviting interested parties to make submissions over a prescribed period of time (the "Consultation Period"). The Consultation Period formally expired on 20 May 2005.

Submissions on the Discussion Paper from Telstra

Telstra's submissions to the Undertakings referred to the submissions it had made in support of 9 January 2003 core services undertakings and 14 November 2003 revised

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[17] Section 152BS(3) and (4). No code is currently mandated under Part XIC.

[18] ACCC, *Telstra's Undertakings for the Unconditioned Local Loop Service: Discussion Paper (public version)*, March 2005.

core services undertakings, and during the core services model price terms and conditions process. However, Telstra also made further submissions relating to claimed costs of provision of ULLS and LSS as part of the current process.

Consultation after release of the ACCC's Discussion Paper

The ACCC also received a number of submissions from Telstra and interested parties by the end of the designated Consultation Period. A list of submissions made and supplementary submissions provided in response to the ACCC's information requests is provided in Appendix F. To the greatest extent possible, the ACCC has posted electronic copies of submissions on its website (http://www.accc.gov.au). Where parties have provided submissions in confidence, or where parts of submissions have contained confidential information as claimed by submitters, this has not been included on the website.

ACCC's Draft Decision

The ACCC draft decision was to reject both Undertakings as it considered them both to be unreasonable. The ACCC invited submissions from interested parties by 2 September 2005. The draft decision is available on the ACCC website (http://www.accc.gov.au).

Submissions on ACCC Draft Decision

The ACCC received several submissions on its draft decision from Telstra and other interested parties. For a full list of submissions see Appendix F. The ACCC agreed to a number of Telstra's requests for time extensions of up to three weeks. Telstra was still unable to submit part of its submission by this date. Furthermore, as it lodged its overdue submission, Telstra added a further unsolicited 'expert report' over a month after the initial deadline for submissions, and two weeks after the ACCC extended date. The delay necessitated the extension of the ACCC decision making period by three months.

The ACCC is conscious of the need for a timely release of its decision, but must balance this aim with the necessity of allowing itself sufficient time to fully understand and analyse the arguments put to it in all submissions. The ACCC is committed to ensuring that in future undertakings processes, interested parties submit submissions in a timely fashion, not only to assist the ACCC in meeting deadlines, but in fairness to other interested parties who may want to time to review the submissions. The process was further delayed by Telstra often not releasing public version of confidential documents until some time after the confidential release. For additional details see section 4.3.4.

4.2.2. Consistency with the standard access obligations

Section 152BV(2)(b) provides that the ACCC must not accept an undertaking unless the ACCC is satisfied that the undertaking is consistent with the SAOs that are applicable to the carrier or provider.

The SAOs are set out in s. 152AR of the Act. In summary, if requested by a service provider, an access provider may be required to:

- supply the declared service
- take all reasonable steps to ensure that the technical and operational quality of the service supplied to the service provider is equivalent to that which the access provider is supplying to itself

- take all reasonable steps to ensure that the fault detection, handling and rectification which the service provider receives in relation to the declared service is of equivalent technical and operational quality as that provided by the access provider to itself
- permit interconnection of its facilities with the facilities of the service provider
- take all reasonable steps to ensure that the technical operational quality and timing of the interconnection is equivalent to that which the access provider provides to itself
- if a standard is in force under s. 384 of the *Telecommunications Act* 1997, take all reasonable steps to ensure that the interconnection complies with the standard
- take all reasonable steps to ensure that the service provider receives interconnection fault detection, handling and rectification of a technical and operational quality and timing that is equivalent to that which the access provider provides to itself
- provide particular billing information to the service provider
- supply additional services in circumstances where a declared service is supplied by means of conditional-access customer equipment.

The question of whether Telstra's undertaking is consistent with any applicable SAOs is considered in Section 5.

4.2.3. Consistency with Ministerial pricing determination

Division 6 of Part XIC of the Act provides that the Minister may make a written determination setting out the principles dealing with price-related terms and conditions relating to the SAOs.[19]

Paragraph 152BV(2)(c) provides that the ACCC must not accept an undertaking dealing with price or a method of ascertaining price unless the undertaking is consistent with any Ministerial pricing determination.

To date, a Ministerial pricing determination has not been made. Accordingly, the ACCC is not required to assess the undertaking under this criterion.

4.2.4. Whether terms and conditions are reasonable

Sub-section 152BV(2)(d) of the Act provides that the ACCC must not accept an undertaking unless the ACCC is satisfied that the terms and conditions specified in the undertaking are reasonable.

In forming a view about whether particular terms and conditions are reasonable, the ACCC must have regard to the range of matters set out in s. 152AH(1) of the Act. In the context of assessing Telstra's undertaking, these are:

- whether the terms and conditions promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services (the long-term interests of end-users)

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[19] Section 152CH of the Act. 'Price-related terms and conditions' means terms and conditions relating to price or a method of ascertaining price.

- the legitimate business interests of Telstra, and its investment in facilities used to supply the declared services
- the interests of all persons who have rights to use the declared services
- the direct costs of providing access to the declared services
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

The ACCC may also consider any other relevant matter.[20]

Set out below is a summary of the key phrases and words used in the above matters. While, in general, these phrases and words have not been the subject of judicial interpretation, it is necessary for the ACCC to form a view as to what they mean.

Long-term interests of end-users

The ACCC has published a guideline explaining what it understands is meant by the 'long-term interests of end-users' in the context of its declaration responsibilities.[21] A similar interpretation would seem to be appropriate in the context of assessing an undertaking.

In the ACCC's view, particular terms and conditions promote the interests of end-users if they are likely to contribute towards the provision of goods and services at lower prices, higher quality, or towards the provision of greater diversity of goods and services.[22]

To consider the likely impact of particular terms and conditions, the Act requires the ACCC to have regard to whether the terms and conditions are likely to result in the achievement of the following objectives:

- the objective of promoting competition in markets for carriage services and services supplied by means of carriage services
- for carriage services involving communications between end-users, the objective of achieving any-to-any connectivity
- the objective of encouraging the economically efficient use of, and economically efficient investment in, infrastructure by which carriage services and services provided by means of carriage services are supplied.[23]

The phrase 'economically efficient use of, and economically efficient investment in… infrastructure' obviously requires consideration of the concept of economic efficiency. This consists of three components:

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[20] Section 152AH does not use the expression 'any other relevant matter'. However, s. 152AH(2) states that the matters listed in s. 152AH(1) do not limit the matters to which the ACCC may have regard. Thus, the ACCC may consider any other relevant matter.

[21] ACCC, *Telecommunications Services — Declaration Provisions: a Guide to the Declaration Provisions of Part XIC of the Trade Practices Act*, July 1999.

[22] Ibid, pp. 32-33.

[23] Sub-section 152AB(2) of the Act.

- Productive efficiency. This is achieved where individual firms produce the goods and services that they offer at least cost.
- Allocative efficiency. This is achieved where the prices of resources reflect their underlying costs so that resources are then allocated to their highest valued uses (i.e. those that provided the greatest benefit relative to costs).
- Dynamic efficiency. This reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

Legitimate business interests and direct costs

The ACCC is of the view that the concept of legitimate business interests should be interpreted in a manner consistent with the phrase 'legitimate commercial interests' used elsewhere in Part XIC of the Act. Accordingly, it would cover the carrier's or carriage service provider's interest in earning a normal commercial return on its investment.

This does not, however, extend to receiving compensation for loss of any 'monopoly profits' that occurs as a result of increased competition. In this regard, the Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996 states:

> ... the references here to the 'legitimate' business interests of the carrier or carriage service provider and to the 'direct' costs of providing access are intended to preclude arguments that the provider should be reimbursed by the third party seeking access for consequential costs which the provider may incur as a result of increased competition in an upstream or downstream market.

When considering the legitimate business interests of the carrier or carriage service provider in question, the ACCC may consider what is necessary to maintain those interests. This can provide a basis for assessing whether particular terms and conditions in the undertaking are necessary (or sufficient) to maintain those interests.

Interests of persons who have rights to use the declared service

Persons who have rights to use a declared service will, in general, use that service as an input to supply carriage services, or a service supplied by means of carriage services, to end-users. In the ACCC's view, these persons have an interest in being able to compete for the custom of end-users on their relative merits. Terms and conditions that favour one or more service providers over others and thereby distort the competitive process may prevent this from occurring and consequently harm those interests.

While sub-section 152AH(1)(c) directs the ACCC's attention to those persons who already have rights to use the declared service in question, the ACCC can also consider the interests of persons who may wish to use that service. Where appropriate, the interests of these persons may be considered to be 'any other relevant consideration'.

Economically efficient operation of, and investment in, a carriage service

In the ACCC's view, the phrase 'economically efficient operation' embodies the concept of economic efficiency set out earlier. It would not appear to be limited to the operation of carriage services, networks and facilities by the carrier or carriage service provider supplying the declared service, but would seem to include those operated by others (e.g. service providers using the declared service).

In the context of assessing an undertaking, the ACCC may consider whether particular terms and conditions enable a carriage service, telecommunications network or facility to be operated in an efficient manner. This may involve, for example, examining whether they allow for the carrier or carriage service provider supplying the declared service to recover the efficient costs of operating and maintaining the infrastructure used to supply the declared service.

Finally, due to the recent amendments to section 152AB(6), the ACCC needs to consider the effect of particular terms and conditions on investment in both existing and any new infrastructure by which the services are or could be provided.

In general, there is likely to be considerable overlap between the matters that the ACCC takes into account in considering the long-term interests of end-users and its consideration of this matter.[24] In particular, the ACCC has found that due to the approach taken by the ACCC in assessing reasonableness of ULLS and LSS monthly charge undertakings, the amendments to section 152AB(6) of the Act are already addressed by the ACCC through the assessment against LTIE criteria.

The question of whether Telstra's Undertakings are reasonable is considered in Sections 6 and 7.

4.2.5. Expiry date

Sub-section 152BS(7) of the Act provides that the undertaking must specify the expiry time of the undertaking. Further, sub-section 152BV(2)(e) provides that the expiry time of the undertaking must be within 3 years after the date on which the undertaking comes into operation.

The Undertakings are to expire by no later than 30 June 2006. The expiry dates in the Undertakings are therefore within the 3 years required by the Act.

4.3. Procedural matters

4.3.1. Confidentiality

In arriving at its final view, the ACCC has relied on commercial-in-confidence information supplied by Telstra and interested parties. The ACCC has assessed this material according to its policy on treatment of information[25] and has determined that, in most instances, it should not reproduce that material in this report.

Accordingly, where information that is commercially sensitive has been relied upon in reaching a conclusion in this report, it has either been aggregated to a level such that it is no longer of commercially sensitive or, where this is not possible, it has been masked with the designation **[c-i-c]**. Unless otherwise indicated, information masked with **[c-i-c]** is information provided by Telstra over which it has made a confidentiality claim.

The ACCC recognises that its decision making processes should be as transparent as practicable, and in this regard notes the opportunity for interested parties to obtain the

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[24] Relevantly, in considering whether particular terms and conditions will promote the long-term interests of end-users, the ACCC must have regard to their likely impact on the economically efficient use of, and economically efficient investment in, the infrastructure by which carriage services and services provided by means of carriage services are supplied.

[25] ACCC, *Collection and Use of Information*, 2000.

commercial-in-confidence information from the provider of that information upon the giving of appropriate undertakings. The ACCC notes that interested parties have been able to negotiate such undertakings in respect of most of the confidential information that has been relied upon by the ACCC.

The ACCC notes that, unless it can corroborate commercial-in-confidence information in some way, it is constrained in the weight that it can give to information that has not been subject to broader industry scrutiny. In certain instances, where it is not possible to otherwise corroborate information, or where parties are unable to reasonably agree to the terms of provision of commercial-in-confidence information, the ACCC would consider requests for it to supply the information so as to allow its scrutiny.

4.3.2. Information requests to Telstra

As the Undertakings were submitted without any supporting material, the ACCC issued Telstra with a section 152BT information request for supporting information on 20 December 2004. Telstra responded on 7 February 2005.

4.3.3. Information relied upon

The ACCC, in its assessment of the Undertakings, has primarily used the supporting submission of Telstra, as well as the submissions of Telstra and interested parties made pursuant to the ACCC's Discussion Paper and Draft Decision. In addition, the ACCC examined information relied upon in its previous decisions, as well as academic literature. The list of information examined by the ACCC can be found in Appendix G.

4.3.4. Decision-making period

The ACCC has a 6 month statutory time frame by which it must make a decision to accept or reject an access undertaking. For the purposes of calculating the 6 month timeframe certain periods of time are disregarded. In particular, the time it takes between when the ACCC makes a request for further information (under s.152BT of the Act) and when an access provider has fulfilled the information request is disregarded, as is the time between when the ACCC publishes an undertaking (and seeks submissions[26]) and the due date for receipt of those submissions (the 'Consultation Period').

At the time the draft decision was released, the 'clock had been stopped' while s. 152BT information requests remained unfulfilled, and for the duration of the Consultation Period. These stoppages resulted in the end of the six-month assessment period being extended to 12 October 2005. At the time the draft decision was released, the ACCC had hoped to release its final decision by October 2005. Further delays meant that this was not feasible.

4.3.5. Extension of ACCC's decision making period

Since the release of the draft decision, further delays have been encountered, primarily Telstra's request for a three week extension to its due date for submissions on the draft decision. This was the catalyst for the ACCC having to extend the timeframe to 12 January 2005, pursuant to s.152BU(7). Furthermore, Telstra submitted a considerable amount of material after the extended deadline, including

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[26] See ss. 152BV(2)(a) of the Act.

additional expert submissions such as the Sidak report[27]. The ACCC also experienced delays in gaining non-confidential versions of Telstra's documents. This hinders the public consultation process, and is unfair on interested parties who devote significant time and resources to reviewing and commenting on the work of their industry peers. Telstra's actions with regard to the untimely submission of material have not facilitated a timely decision making process, and have ultimately led to a three month extension of the decision making period, as noted above.

[27] G. Sidak, *Expert report of J. Gregory Sidak*, 22 September 2005.

5. Consistency with standard access obligations

5.1. The standard access obligations

Under s. 152BV(2)(b), the ACCC must not accept the Undertakings unless it is satisfied that they are consistent with the SAOs that are applicable to Telstra. The SAOs are set out in s. 152AR of the Act. An access provider that supplies a declared service to itself or others must comply with any applicable specified obligations. These obligations were referred to above in section 4.2.1.

Most of the SAOs detailed in section 4.2.1 apply to Telstra in its supply of the declared ULLS and LSS. The exceptions are the SAOs that would apply if a relevant standard was in force under s. 384 of the *Telecommunications Act* 1997 and the SAOs that relate to a declared service supplied by means of conditional-access customer equipment.

5.2. Approach to assessing consistency with the standard access obligations

The Act does not detail a specific approach for assessing whether the terms and conditions in an undertaking are consistent with the access provider's SAOs. The ACCC finds it useful to consider whether the terms and conditions in an undertaking raise any inconsistencies with the SAOs. If the terms and conditions are not inconsistent with the obligations, the ACCC is likely to regard them as consistent.

The ACCC considers that terms and conditions specified in an undertaking would be inconsistent with the SAOs if an access provider in giving effect to those terms and conditions would not satisfy each of the applicable obligations. Such inconsistency could arise either expressly or by implication from the circumstances in which the terms and conditions could be satisfied.

The purpose of this assessment is to ensure that an access provider would comply with the SAOs should the Undertakings be accepted. The ACCC is not here concerned with the reasonableness of the terms and conditions of the Undertakings. Reasonableness is assessed separately in section 6.

In making this assessment, it has been necessary for the ACCC on occasion to interpret how the Undertakings would operate. The ACCC's assessment of the Undertakings is based on the ACCC's interpretation of the relevant terms and conditions. Any alternative interpretation that might be given to the Undertakings at a later time cannot be said to have been considered or accepted by the ACCC as consistent with the SAOs. Accordingly, an undertaking can only be considered as accepted to the extent that it is given effect consistent with the ACCC's understanding of the undertaking at the time of conducting its assessment.

The ACCC has especially considered whether any of the non-price terms and conditions specified in the Undertakings (including the attachments) are inconsistent with each of the applicable SAOs. The price terms and conditions are more relevant to an assessment of reasonableness.

5.3. Assessment

Clause 3.1 of each of the respective undertakings provides that Telstra will comply with the terms and conditions specified in the various attachments to the Undertakings to satisfy the relevant SAOs.

The terms and conditions principally relate to pricing, although the attachments also contain clauses that may be classified as non-price terms and conditions.

The Undertakings specify services of particular technical attributes (Telstra services) and then set out the terms and conditions upon which these Telstra services will be supplied. These terms and conditions do not specify all the matters which an access provider and access seeker would need to agree on in the supply of the services.

5.3.1. Non-exhaustive scope of the undertakings

While the price and non-price terms and conditions that are contained in the Undertakings do not cover all of the matters relating to the supply of a service, it is the ACCC's view that it is not necessary for an undertaking to exhaustively address all matters that could relate to the applicable SAOs.

Any relevant matters that are not addressed in the Undertakings could be settled by commercial negotiation. Should the parties be unable to reach agreement, the matters could be determined in an ACCC arbitration if a dispute was notified.

Accordingly, the ACCC considers that the absence of terms and conditions about certain matters does not, of itself, make an undertaking inconsistent with the SAOs. However, it is open to the ACCC to form a view that the absence of certain terms and conditions could make the undertaking unreasonable in the terms of section 152BV. This issue is discussed further below in relation to whether the undertaking should better clarify its application to certain connection/provisioning scenarios.

5.3.2. Whether the undertakings specify terms and conditions for services other than the Telstra services

The ACCC notes that there could be uncertainty about the scope of the Undertakings as they specify terms and conditions for services which are not defined in the precise form used to define the relevant declared services. In certain respects, the Telstra services would appear more limited than the declared services. Some of these limitations are noted below.

The ACCC's interpretation is that the price and non-price terms specified in the Undertakings apply *only* to the services supplied by Telstra (the Telstra Services) and not to the relevant (corresponding) declared services if there are differences in definition or specification. In other words, Telstra would not be required to supply, on the terms in the Undertakings, a form of the declared service that was different to or beyond the scope of a Telstra Service.

If the Undertakings were interpreted as specifying terms and conditions for *all* possible forms of the declared services, then Telstra could, in accordance with the Undertakings, refuse to supply any form of the declared service other than the Telstra Service specified in the undertakings. If such an interpretation was given to the Undertakings, the ACCC could not be satisfied that the Undertakings were consistent with Telstra's SAOs.

Accordingly, the views expressed below assume that the Undertakings specify terms and conditions only for the supply of Telstra Services and not for every possible form of the relevant declared services.

The practical consequence of this distinction depends on the extent to which a Telstra service would not actually cover all instances of the corresponding declared service.

The ACCC notes the following about the ULLS undertaking:

- the Telstra service will support a connection with DC continuity – there is no requirement for the Telstra service to support any other service
- the Telstra service involves the use of a continuous metallic twisted pair, whereas the declared service involves the use of an unconditioned copper based wire
- the undertaking does not specify prices for ULLS where the end user is connected to IRIM/RIM/CMUX and therefore arguably does not cover connection to these points. By contrast, the declared service enables connection to any of these network nodes.

The ACCC also notes the following about the LSS undertaking:

- the Telstra service specifies that the access seeker gets access to the non-voice ADSL frequency spectrum while the declared service only specifies non-voiceband frequency spectrum
- the Telstra service involves the use of a continuous metallic twisted pair, whereas the declared service involves the use of an unconditioned copper based wire
- the Telstra service excludes certain provisions of the LSS where the Telstra customer access module is not located in a Telstra exchange, whereas the declared service does not draw this distinction.

At this time, the ACCC's consultation with access seekers has not revealed any significant current or prospective use of the relevant declared services that would not fall within the scope of the services definitions or specifications in the Undertakings. The ACCC has not been presented with evidence that such a use will emerge before the expiry of the undertakings.

However, if an access seeker was to seek access to a form of a declared service other than as specified in the Undertakings, then the ACCC believes that it would be open to the access seeker to negotiate access to the different form of the declared service from Telstra. If Telstra and the access seeker could not agree on terms and conditions of access to such a form of the declared service, the access seeker could ask for the ACCC to arbitrate.

5.3.3. Supply, quality and fault handling in relation to the declared services

The attachments to the Undertakings specify certain technical requirements and applicable codes or industry standards relating to supply of the Telstra services. The ACCC has not received submissions contending that these requirements would be inconsistent with the obligation to provide services of an equivalent technical and operational quality.[28] On their face, the provisions of the Undertakings do not appear to be inconsistent with this obligation insofar as they relate to the Telstra services.

The Undertakings do not contain provisions specifying how Telstra will satisfy its obligations regarding the quality and timing of fault detection, handling and rectification for the Telstra services. Nor do they contain provisions on the commencement, refusal, suspension or termination of supply.

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[28] The ACCC has previously sought industry comment on the appropriateness of these or quite similar technical attributes.

The ACCC does not consider that this necessarily makes the Undertakings inconsistent with the SAOs specified in section 152AR(3) of the Act. Rather, Telstra has simply chosen not to specify in these undertakings all aspects concerning how these obligations will be satisfied in respect of the Telstra services[29]. The ACCC considers that, should agreement not be reached on these matters, any such disagreement could be resolved by the ACCC in arbitration.[30]

Overall, ACCC is of the view that the Undertakings in so far as they stand are consistent with the standard access obligations in relation to the supply and quality of the Telstra services and related fault handling obligations.

5.3.4. Interconnection of facilities

The attachments to the Undertakings specify how the location of points of interconnection (POI) between Telstra's network and the service provider's network are to be determined. The undertakings for the ULLS and LSS are similarly worded, stating that the POI:

> "means, in relation to a line, a point that is an agreed point of interconnection located at or with a TCAM and located on the [ULL/SSS] End Customer side of the TCAM"

In particular, the Undertakings specify that the POI will be at a point agreed by Telstra and the service provider.

It is unclear to the ACCC why the POI would be defined by relation to a TCAM, when the use of a ULLS should mean that there is no Telstra equipment involved in the provision of services to the end-user. It would be expected that the access seeker would provide the customer access module if it was acquiring an ULLS. While the ULLS line would attach to Telstra's MDF, the ACCC understands that an MDF would not be considered as a TCAM. However the ACCC notes that this issue was not raised by interested parties and therefore may not be a concern. No further submissions on this issue were received from interested parties.

The Undertakings do not contain further provisions relating to the technical and operational quality and timing of interconnection, or provisions in relation to interconnection, fault detection, handling and rectification. The ACCC considers that the terms and conditions set out in the Undertakings relating to interconnection of facilities would not make the Undertakings inconsistent with the SAO to permit interconnection of facilities (s. 152AR(5)). While Telstra has chosen not to specify in its Undertakings all the terms concerning interconnection of facilities, the ACCC does not consider that this makes the Undertakings inconsistent with the SAO to permit interconnection of facilities. Should the negotiations contemplated by the terms and conditions, or negotiations concerning other aspects of facilities interconnection, not result in agreement, the ACCC considers that those matters could fall for determination by the ACCC in arbitration.

Overall, the ACCC considers that the Undertakings are consistent with the SAOs relating to interconnection of facilities.

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[29] It is understood such aspects are addressed by Telstra in its individual access agreements.

[30] It should be noted that the ACCC has also published its views on the model (non-price) terms and conditions for the ULLS and this view would also inform any dispute on such matters.

5.3.5. Provision, timing and content of billing information

Sub-section 152AR(7) of the Act provides that the billing information that must be provided by an access provider to a service provider must be given at such times and in a manner ascertained in accordance with the *Trade Practices Regulations*. Regulation 28S provides that billing information must be given in a manner and form, and at the times, agreed by the access provider and service provider. It also sets out the type of billing information that must be given.

The Undertakings do not contain terms and conditions on the provision, timing and content of billing information. The ACCC therefore considers that billing matters would be resolved by commercial negotiation or arbitration, and considers at this time that the Undertakings are not inconsistent with the billing information SAOs.

5.3.6. Conclusion

The ACCC's final view is that the Undertakings in as far as they address relevant provisions are consistent with Telstra's SAOs.

However, the ACCC wishes to emphasise that it considers the Undertakings cover only certain forms of the declared services – Telstra's Services – and that it would be open to access seekers to seek other forms of the declared services, including by recourse to arbitration by the ACCC if agreement cannot be reached between Telstra and the access seeker. However, the ACCC acknowledges that it is unlikely that access seekers would seek to access the declared services in different forms from that specified by Telstra during the period of operation of the Undertakings.

The ACCC also emphasises that the Undertakings do not contain a complete set of terms and conditions or deal with all aspects of the acquisition of the services covered in the Undertakings. However the Undertakings are not required to be exhaustive, and other terms and conditions of supply could be determined by commercial negotiation, or failing agreement, through arbitration by the ACCC.

6. Reasonableness of the proposed ULLS monthly charge undertakings

The ACCC cannot accept an undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether the terms and conditions are reasonable the ACCC must have regard to the matters set out in s. 152AH(1) of the Act. The ACCC is not however limited to consideration of just the matters set out in s. 152AH(1) of the Act.[31] Accordingly, the ACCC may have regard to any other matters it believes are relevant to its consideration of whether the terms and conditions are reasonable.

In determining whether particular terms and conditions are reasonable, under section 152AH of the Act, the ACCC must have regard to:

- whether the terms and conditions promote the long-term interests of end-users (LTIE)
- Telstra's legitimate business interests
- the interests of persons who have rights to use the declared service
- 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, a telecommunications network or a facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

Where appropriate and where the ACCC considers it usefully facilitates its consideration of the matters under section 152AH(1) the ACCC has given consideration to the 'future with and without' test, expressed in the Sydney Airports case[32]. Applying this test with respect to particular terms and conditions requires the ACCC to contrast the outcome assuming acceptance of the undertaking against the outcome assuming rejection of the undertaking. The ACCC does not apply this test where it considers it does not helpfully assist it with determining the reasonableness of particular terms and conditions. The ACCC notes that while the 'future with and without' test can be applied explicitly, in most instances it is implicit in the ACCC's assessment. For example, when the ACCC assesses various methodologies for the recovery of ULLS-specific costs, underlying this assessment is a 'future with and without' scenario. To the extent the undertaking proposes prices which are above those considered reasonable (above what is required to meet the reasonableness criteria) the ACCC would conclude that the 'without the undertaking' scenario is likely to lead to superior outcomes. Prices determined through an alternate process (arbitration/negotiation) would be more consistent with the statutory criteria as compared to those in the undertaking ('with the undertaking' scenario).

This chapter contains the ACCC's conclusions with respect to its consideration of whether the terms and conditions set out in the ULLS monthly charge access undertaking are reasonable. The ACCC has conducted its detailed consideration of

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31 Section 152AH(2).

32 *Sydney Airports Corporation Ltd* (2000) 156 FLR 10.

the terms and conditions under the relevant legislative criteria in the appendices to this decision.

6.1. Summary

The ACCC has found that the terms and conditions contained in the undertaking are not reasonable to the extent the price terms and conditions aim to recover:

- an ADC
- an IEN bypass charge
- network costs which are above what the ACCC considers an appropriate upper bound
- ULLS-specific costs which are above what the ACCC considers appropriate.

In considering the price terms and conditions, and having regard to the matters set out in section 152AH(1) of the Act, the ACCC forms the view that it cannot accept the undertaking because it is not satisfied that the terms and conditions are reasonable.

The ACCC has conducted its detailed consideration of the terms and conditions under the relevant legislative criteria in other sections of this decision. In particular, with respect to the price terms and conditions, consideration of:

- the ADC is conducted at Appendix B
- the IEN is conducted at Appendix D
- the network costs at Appendix E
- the ULLS-specific costs at Appendix A

In summary the ACCC considers that:

- reasonable ULLS monthly charges consist only of a contribution to network costs and a contribution to ULLS-specific costs
- the network costs claimed by Telstra are above the upper bound of reasonable costs. The reasonable upper bound is given in Table 6.4.1
- the ULLS-specific costs ought to be recovered from a broader range of customers including Telstra's own customers.

With respect to recovery of ULLS-specific costs the ACCC has not considered it necessary for the purposes of consideration of the undertakings to reach a definitive view at this time as to which customers ought to be included. This is because under any definition discussed in this decision, the contribution from undertakings prices to ULLS-specific costs would be above the efficient level of these costs. In other words, when added to the upper bound of reasonable network costs, ULLS-specific costs contribution calculated under any considered approach (and significantly this includes the approach proposed by Telstra in its undertakings) results in total costs below Telstra's undertaking prices in the key Band 2 area.[33] Further, given that the ACCC considers ULLS-specific costs ought to be recovered from a broader range of customers, proposed prices would over-recover ULLS-specific costs a number of times over in all bands.

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[33] This is also true for the prices in Band 3.

Given the findings above, the ACCC considers the price terms and conditions are not reasonable and that it is not satisfied that the terms and conditions specified in the undertaking are reasonable.

6.2. ULLS-specific costs

In Appendix A the ACCC has conducted its assessment of whether the price terms and conditions contained in the undertakings are reasonable to the extent they seek to impose charges in relation to the claimed LSS-specific costs. In this section of the report the ACCC notes its key findings.

6.2.1. Summary

To summarise the ACCC concludes that:

- regardless of the method of cost recovery chosen, Telstra's costs are below the proposed price, thus the proposed prices are unreasonable
- if the recovery of specific costs was from the largest customer base possible – including Telstra's customer base – prices proposed by Telstra would allow for a recovery of costs more than 200 times greater than the efficient level of ULLS-specific costs, and are therefore not reasonable
- even if it were not appropriate to recover the costs from the largest possible customer base, and the costs were recovered from all ADSL services Telstra's prices would still recover an amount over 10 times the efficient level of ULLS-specific costs, and are therefore not reasonable
- while it would be desirable to recover specific costs from a larger customer base than that proposed by Telstra (see below) even if it were not appropriate to recover costs from all services, and they were recovered only from all ULLS-related lines (lines that that have been taken as a ULLS or LSS service) Telstra's prices would over-recover ULLS-specific costs, and are therefore not reasonable.

The ACCC does not come to a definitive view on the cost-recovery base at this time, as having regard to the relevant legislative criteria, under any method chosen, the proposed charges as set out in the undertaking are not reasonable. In Appendix A the ACCC has conducted its assessment of whether the price terms and conditions contained in the undertakings are reasonable to the extent they seek to impose charges in relation to the ULLS-specific costs claimed by Telstra. In this section of the report the ACCC notes its key findings.

While this section discusses the appropriateness of ULLS-specific costs, similar arguments are relevant to the assessment of appropriate LSS-specific costs. The key issue in assessing the appropriateness of Telstra's ULLS-specific cost claim is the appropriate method of cost recovery. The ACCC outlined in its discussion paper four different approaches which may be taken.[34] Those were that costs should be spread over:

[34] ACCC, *Telstra's Undertakings For the Unconditioned Local Loop Service: Discussion Paper (Public Version)*, March 2005, pp. 19-21

- *all* active CAN lines[35]
- *all* active ADSL lines
- all lines which have ever been ULL services
- only those lines which are current active ULL services being used by access seekers.

To illustrate these differences, Table 6.2.1 sets out the 2000-01 value of costs which Telstra would need to justify a cost claim of $10 per month per ULLS to be reasonable under each option.

Figure 6.2.1 Present value of demand

Option	Required costs ($)
All CAN lines	≈**[c-i-c]**[36]
All ADSL lines	≈**[c-i-c]**[37]
All lines which have ever been ULLs	≈**[c-i-c]**[38]
Active ULLs	≈**[c-i-c]**[39]

Telstra's cost claims for ULLS in 2000-01 dollars is [**c-i-c**], while its cost claim for LSS in 2001-02 dollars is [**c-i-c**]. If the all lines or all ADSL lines option was adopted, so that both LSS and ULLS specific costs are spread over these lines, Telstra's cost claim is clearly excessive in comparison to what is required to justify a $10 per month ULLS-specific cost charge. If, however, the all (passive and active) ULLS or active ULLS option is chosen, then it is necessary to consider in more detail the costs claimed by Telstra. The ACCC previously calculated total ULLS-specific costs, based on the adjustments to Telstra's model made by ACCC's consultants[40], of less than [**c-i-c**]. Consequently, under any approach, Telstra's proposed prices are above costs of provision and as such are unreasonable.[41]

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[35] This could be either all CAN lines or only those where the ULL is a broadly viable service.

[36] Based on an assumption that there are 10 million active CAN lines at any one time over the past 5 years. As discussed in **Appendix A** it may be appropriate to spread the specific costs over lines which may reasonably be used for ULLS. If this is the case, the figure here should be reduced, but would always be much higher than the efficient specific costs.

[37] Based on the ACCC's most recent broadband snapshot with discrepancies filled assuming average growth between points.

[38] Using estimates based on Telstra's estimates within its ULLS specific cost model.

[39] Using estimates based on Telstra's estimates within its ULLS specific cost model.

[40] CMPI and AAS, *Review of Telstra's ULLS-specific Costs – Draft Report.*

[41] The appropriateness of Telstra's claimed costs is only relevant as a determinative factor for more narrow cost recovery methods.

6.2.2. The appropriate method of cost recovery

In its discussion paper, the ACCC asked for comments on the appropriate means of cost recovery. Comments were received from Telstra, Optus, AAPT and Macquarie.

Telstra argues that specific costs ought to be recovered from ULLS users alone. In making this argument, Telstra relies on a report prepared by Henry Ergas.[42] The argument is summarised by Ergas,

> I understand the ULLS-specific costs are caused by ULLS alone. As a result, economic efficiency and the statutory criteria require that they be recovered from ULLS lines alone.[43]

Ergas bases his argument on 'a key principle of economics' that prices should reflect *incremental* cost.[44] There are, however, two difficulties with Ergas' argument. First, it assumes that the incremental costs are caused by the users of the ULLS and second, it assumes that it is possible for ULLS users alone to pay ULLS-specific costs and still meet LTIE objectives.

First, it is questionable that ULLS costs are strictly caused by end users of ULLS services. When the ACCC declared the ULLS in 1999, it indicated that the declaration would lead to an increase in competition and consequently an increase in allocative efficiency. In the ACCC's view, this would occur because of the tendency for competition to lead to lower prices. It is implicit in this argument that, in the absence of ULLS, Telstra's monopoly over the local access loop allows it to price above cost. In the ACCC's view, the benefit of the ULLS is it provides the conditions under which a reduction in prices can occur, and the beneficiaries are *all* consumers whose prices are reduced because of the process.[45] Consequently, economic efficiency requires that all consumers (beneficiaries) bear the cost.

The argument can also be viewed from the perspective of the individual consumer. Suppose that the ULLS was implemented leading to a contestable market for the supply of access services and forcing prices to a competitive level (plus entry costs).[46] Suppose further that, because of switching costs[47], no consumers actually took up the ULLS. There are no ULLS consumers over which to spread the costs and in such a situation according to Ergas' approach, above, the costs of the ULLS should not be recovered. However, it is evident that *all* consumers benefit from lower prices and ought to contribute to the costs of the system. Thus, the ULLS-specific costs could be recovered from all consumers through a slightly higher (retail) price. At the limit, the ACCC estimates that this increase would not exceed 5 cents per line per month or 60

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[42] H. Ergas, *Expert Report on Recovery of ULLS-Specific Costs (Public Version)*, CRA International, May 2005.

[43] *Ibid*, p. 1.

[44] Ergas refers to the classic text, A Kahn, *The Economics of Regulation: Principles and Institutions*, 1995, Vol. 1, pp. 63-70.

[45] To the extent that price caps were, at that time, restraining Telstra's pricing, the benefit of the ULLS, when used to its optimal extent, would be that competition would constrain pricing, allowing the removal of the price cap regime.

[46] See, W. Baumol, E. Bailey and R. Willig (1977), 'Weak Invisible Hand Theorems on the Sustainability of Multiproduct Natural Monopoly', *American Economic Review*, 67(3), pp.350-365.

[47] These are costs, such as ULLS-specific costs, which are borne disproportionately by access seekers.

cents per year. So long as this small increase in price does not offset the overall reduction in prices coming from competition, which is unlikely, the benefits of the ULLS declaration will outweigh its costs.

The ACCC, therefore, sees some merit in Optus' argument that,

> …the cause of the ULL specific costs was the need to address the market failure surrounding the natural monopoly status of the local loop. The cause of this market failure, and therefore the responsibility for funding the associated regulatory costs, cannot be attributed to any one party.[48]

It also sees some merit in the argument of AAPT that,[49]

> [Specific costs] are unavoidable costs of running the monopoly CAN, not optional costs from providing an incremental service.[50]

Ergas also assumes that it is possible for Telstra to recover the specific costs from ULLS users alone. This, however, is not likely to be the case. In a monopolistically competitive market such as telecommunications, it is reasonable to assume that long run equilibrium will be characterised by zero profits for the marginal entrant,[51] and that price will equal the average cost of access seekers.[52] In providing the ULLS to a retail customer, firms incur two forms of average costs; network costs and ULLS-specific costs. If ULLS users alone pay for ULLS specific costs, this will lead to a higher average cost for access seekers, and consequently a higher retail price. Market prices will then be *above* average costs for Telstra. Consequently, even Telstra customers will face a price above cost due to the way the specific cost is allocated. This, however, will not merely cover the costs of the ULLS but will amount to a super normal profit for Telstra. In effect, Telstra's customers will pay the same as ULLS users do. The realisation of a super normal profit does not appear reasonable under the (LTIE) regulatory criteria noted in previous section.

Thus, it may not be possible for ULLS users alone to both pay the ULLS-specific costs and compete effectively with Telstra. In fact, prices even for non-ULLS users will be lowest when ULLS-specific costs are spread over the broadest range of users possible.[53]

In response to the above, Ergas stated that:

> In my report *Expert report on recovery of ULLS-specific costs (Public version) of May 2005* I do not, *"assume" (as stated by the ACCC)*, that it is possible for the LTIE to be

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[48] Optus, *Optus Submission to the Australian Competition and Consumer Commission on Telstra's ULLS Undertakings*, May 2005, p. 8.

[49] Macquarie also agrees with this line of argument. Macquarie, *Macquarie Telecom's Response to Telstra's Undertakings on the Unconditioned Local Loop Service*, 1 June 2005, p. 4.

[50] AAPT, *Submission by AAPT Limited to the Australian Competition and Consumer Commission in Response to Telstra's Unconditioned Local Loop Service and Telstra's Undertakings for the Line Sharing Service Discussion Papers*, March 2005, May 2005, p. 5.

[51] This is the standard assumption in Chamberlinian models of monopolistic competition. See, for example, A. Dixit and J. Stiglitz (1977), 'Monopolistic Competition and Optimum Product Diversity', *American Economic Review*, 67(3), pp. 297 – 308, p. 300.

[52] Access seekers are assumed to have higher average costs if they are paying the ULLS-specific costs and Telstra is not. This amounts to assuming that Telstra and access seekers are equally efficient otherwise.

[53] Some further details are discussed in **Appendix A**.

> met if ULLS-specific costs are recovered from ULLS users. Rather, I state, with reference to economic principles, why recovery of incremental costs only from ULLS is consistent with the LTIE criteria.[54]

The ACCC considers that to form the view that recovery of ULLS-specific costs only from ULLS is consistent with LTIE criteria, one must first assume that this is at all possible.

Further, Ergas claims that:

> My paper makes reference to those who *cause* the ULLS specific costs to be incurred bearing the costs, as occurs in any effectively competitive market, not the (possible) *beneficiaries* of a service bearing the costs. The ACCC appears to have mixed the concepts of causation and benefit in drawing its conclusions from my report.[55]

The ACCC notes it has not mixed up the concepts of cost causation and benefit. The ULLS-specific costs have not been incurred by Telstra as a result of access seekers using the ULLS. These costs have been imposed as a result of the declaration of the ULLS. Further, the majority of these costs, such as development of IT systems, and even the base number of staff, would still be incurred even if no ULLs were actually supplied. The ULLS has been declared in order to provide benefits to users of telecommunications services. Therefore, the concepts of cost causation and benefit are linked.

Finally, Telstra argues that, even if it is appropriate for these costs to be recovered from all lines,

> 'it is not clear…how the Commission intends this to occur given the retail price controls that constrain Telstra's retail prices…'[56]

However, as shown in the ACCC's, *Telstra's Compliance with Price Control Arrangements 2003-04*, the retail price caps did not constrain Telstra's pricing in the financial year 2003-04 and in any case the very modest increase that would otherwise be required is well within any price cap limits that may apply.

Consequently, the ACCC considers that it would be consistent with the regulatory criteria for Telstra to spread ULLS and LSS-specific costs over all those lines which benefit from the declaration of these services. However, having regard to the matters under section 152AH, the ACCC concludes that spreading the costs over the range of lines proposed by Telstra would not be reasonable. The ULLS may have competitive effects in two distinct areas. First, if ULLS is used to provide both voice and data, the beneficiaries will be the users of *all* telephone services. This characterisation suggests that the specific costs should be spread over all lines. Second, ULLS may only or primarily provide for competition in broadband services. If this is the case, then the beneficiaries are all broadband users and the specific costs should be spread across all xDSL enabled lines. Therefore, in considering the relevant statutory criteria, an undertaking based on Telstra's cost claim to spread its ULLS-specific

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[54] H. Ergas, *Response to Inaccurate Citations by the ACCC of Previous Expert Reports by Henry Ergas*, September 2005, p 2.

[55] *Ibid*, p 3.

[56] Telstra, *Public Version of Telstra's Submission in Response to the Australian Competition and Consumer Commission's Discussion Paper in Respect of ULLS Received March 2005*, 27 May 2005, p. 20.

costs only over existing ULLS customers is not reasonable. This issue is discussed in more detail in Appendix A.

From a pragmatic perspective, the ACCC notes that annual ULLS and LSS specific costs combined amount to less than 0.05 per cent of Telstra's annual revenue. On the other hand, distributing these costs over the broadest possible range of customers would result in a ULLS price that is approximately **[c-i-c]** less than that proposed by Telstra's undertakings.

Table 6.2.1 ULLS specific cost charges under various scenarios [c-i-c]

	ULLS specific cost (line/month)	ULLS Band 2 Network costs (line/month)	Proposed Band 2 ULLS charge
• Required for Telstra's undertakings to be reasonable	[c-i-c]	[c-i-c]	[c-i-c]
If specific cost distributed over:			Total Band 2 cost
• all DSL capable lines	[c-i-c]	[c-i-c]	[c-i-c]
• all DSL lines	[c-i-c]	[c-i-c]	[c-i-c]
• all lines that were ever used for ULLS (and based on revised demand estimates)	[c-i-c]	[c-i-c]	[c-i-c]
• only active ULLS lines (based on revised demand estimates)	[c-i-c]	[c-i-c]	[c-i-c]

Note: The above figures are approximate based on actual and estimated demand for ULLS, LSS, ADSL and basic access services.

To summarise, the ACCC concludes that:

- all or most consumers are likely to benefit from the price reductions arising from ULLS competition, regardless of whether they are individually served by a ULLS line
- as all consumers benefit from the provision of the ULLS, economic efficiency requires that all consumers bear the cost
- failure to distribute costs across an appropriate number of lines would be detrimental for economic efficiency and fail to promote competition and the LTIE as required under the relevant statutory criteria as this would maintain higher prices than are efficient, which would disproportionately impact on access seekers and end-users
- even under Telstra's method of distributing costs to only ULLS lines, the proposed undertaking charges are above costs of provision.

The ACCC therefore concludes, as set out in 6.2.1 above, that Telstra's proposed method of cost recovery is not reasonable in light of the statutory criteria under which the ACCC must consider the terms and conditions of an undertaking. The assessment against the regulatory criteria is conducted Appendix A. Based on this consideration, the price terms and conditions contained in the undertaking that seek to impose charges based on this method of cost recovery are not reasonable. Further, in the event the ACCC was to consider Telstra's method of cost recovery reasonable, Telstra's proposed prices are excessive in relation to the costs of provision of ULLS in Bands 1, 2 and 3, and as such the proposed ULLS prices would not be reasonable.

The ACCC notes that while Telstra has expressed it disagrees with the option of distributing ULLS-specific costs over all lines, it has not provided any further substantial argument outlining why its proposed mechanism for recovery of these costs is appropriate under the legislative criteria. Telstra's views on this matter are addressed in Appendix F.

6.2.3. ACCC's view on ULLS-specific costs

Based on its consideration of the statutory criteria set out in section 152AH the ACCC considers it the price terms and conditions proposed by Telstra are not reasonable to the extent they are based on the ULLS-specific costs claimed by Telstra.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

The ACCC concludes that the price terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers and the persons who have rights to use the service
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of telecommunications services.

Accordingly, the ACCC's decision is to reject the ULLS-specific costs as claimed by Telstra. The ACCC considers that price terms and conditions based on such costs are not reasonable.

6.3. IEN Costs

Telstra argues it has an obligation to be the carrier of last resort (COLR) for all end users who require a retail standard telephone service (STS). This includes even those who acquire STS from a competing carrier using ULLS and do not require the use of Telstra's core (IEN) network. Telstra believes this COLR obligation imposes a cost

on Telstra and gives a benefit to ULLS access seekers and their customers. Therefore, it argues for recovery of these costs from ULLS (monthly) prices.

The relevant costs are divided by Telstra into:

- the foregone contribution that would otherwise have been secured from ULLS customers towards the common costs of the IEN
- any additional IEN costs associated with IEN capacity which is reasonably necessary to accommodate demand that might be expected in the event of customers switching back services using Telstra's IEN from ULLS.

6.3.1. Common IEN Costs

Telstra identifies common costs of the IEN as:

> The relevant IEN common costs are those that would be incurred regardless of the number of customers using the IEN.[57]

Telstra further states that:

> The Common costs to which Telstra is referring are the common costs of the IEN, not Telstra's common costs more broadly. These IEN common costs are only incurred if Telstra provides an IEN service and are not incurred otherwise.[58]

From the above statements, it follows that if an access seeker were to provide services via its own IEN, it would need to incur the same IEN common cost. Therefore, the access seeker would need to recover its own IEN common cost from its customers' traffic as well as Telstra's common IEN costs. As common costs are invariant to demand, as long as the total traffic amount of Telstra exceeds that of its nearest competitors, Telstra will have a lower per unit IEN common cost than access seekers. As a result Telstra will be able to cover its entire IEN common costs from its customers' traffic without a competitive disadvantage. For the period of the undertaking, Telstra will almost certainly remain the provider with the greatest volume of traffic.

If Telstra were allowed to recover a contribution of IEN common costs from access seekers via ULLS, the following costs would be incurred:

Telstra costs:

> *Line costs + Proportion of Telstra IEN common costs*

Access seeker costs:

> *Line costs*[59] *+ Proportion of Telstra IEN common costs + own IEN common costs*

Clearly, this would result in access seekers having costs which are above those of Telstra, and would lead to retail prices which allow Telstra to make a positive economic profit. This outcome seems similar to recovering ULLS costs only from

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[57] Telstra, *Public Version of Telstra's Submission in Support of the ULLS Monthly Charges Undertaking Dated 13 December 2004*, March 2005, p 24.

[58] Telstra, *Public Version of Telstra's Submission in Response to the Australian Competition and Consumer Commission's Discussion Paper in Respect of the ULLS Received March 2005*, p 26.

[59] Through the ULLS line charge.

ULLS customers which is not competitively neutral and does not appear reasonable under the regulatory criteria.

6.3.2. Traffic Sensitive IEN Costs

In considering these claimed costs, the following question needs to be posed: Would Telstra reduce the size of its IEN, and therefore reduce IEN costs, in the absence of COLR obligations? If the answer is "no", then Telstra cannot claim that additional costs need to be recovered from the ULLS. However, Telstra claims that:

> If those [COLR] obligations did not exist, Telstra would reduce the traffic sensitive costs of the IEN.[60]

Regardless of the COLR obligations, it is efficient for Telstra to maintain an IEN of sufficient size to supply expected future demand. It is reasonable that a firm operating in a competitive environment, and wishing to compete for customers, would maintain a network large enough to cover its current customer base and its expected future customer base. However, the ACCC believes that the costs of maintaining excess capacity (for a future customer base) should be recovered only once the new demand materialises, and not from the current customer base.[61] If it were an efficient firm, Telstra will maintain excess IEN capacity for expected future demand. However, in case of Telstra, this future demand will include a component due to COLR obligations, as well as future demand resulting from Telstra's competitive customer acquisition. So long as the customers which return due to the COLR (or competitive acquisition) are marginally profitable (and they are likely to be because the incremental cost of supply is very low) Telstra will maintain a network of sufficient size to supply them. As noted above, the cost of this excess capacity should be recovered once new customers come on line, rather than from existing customers or from the customers of other carriers.

In building competitive infrastructure, efficient access seekers will also provision their network for future demand. To allow Telstra to recover its claimed IEN costs from ULLS would result in the following cost incurred by Telstra and access seekers from **current** customers:

Telstra costs:

Line costs + current customer IEN costs

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[60] *Ibid*, p. 30.

[61] Telstra incorrectly claims that the ACCC is inconsistent in not allowing Telstra to provision any spare capacity in the PIE II model. The ACCC believes that it is efficient for Telstra to provision for future demand in building its network, when costs of doing so today are less than costs of adding capacity at a later date. However, the ACCC argues that these additional costs should be recovered from future demand, once it is realised. If the ACCC allowed for provisioning for future demand in the PIE II model, the result would be that current customers would be paying for costs incurred in supplying future customers, thus over-recovering costs. Once new demand is materialised, Telstra would claim further provisioning is necessary to satisfy the new demand thus the over-recovery cycle would repeat itself. If prices were indeed set on the basis of the PIE II model, without provisioning for future demand, even if such provisioning was in fact undertaken, would ensure that all costs are recovered from the appropriate customer base, and not over-recovered.

Access seeker costs:

> *Line costs + current customer IEN costs + Telstra's cost of provisioning for new customers (IEN surcharge) + own costs of provisioning for new customers*

This outcome clearly results in higher costs for access seekers than for Telstra for acquiring what in effect are the same services. These additional costs are not strictly due to efficiency/cost or quality/service differences, but rather appear to be due to the apparent need for Telstra to recover foregone revenues because of by-pass possibilities. This does not appear to be a sufficient reason for departing from competitive neutrality principles and is not reasonable under regulatory criteria.

While Telstra may claim that it will have to provision to a greater extent because of the fines associated with the COLR obligation, this is questionable for two reasons. First, if the market was competitive, Telstra would provision in accordance with its expected market share. It is only because of its market power that it might choose to provision to a lesser extent and to push up prices. Second, as Telstra has always been aware of its COLR obligations, it was open to it to sell access to its IEN at a price which would have discouraged by-pass and enabled it to maintain all customers on its IEN, thus avoiding what it sees as the IEN bypass problem.[62] For Telstra to price above this point, encouraging by-pass, and to then try and recoup its losses through an IEN bypass charge would unreasonably reduce the contestability of the IEN, reduce the intensity of competition and, therefore, conflict with the regulatory criteria.

The ACCC remains unconvinced by Telstra's arguments that it will be unable to purchase capacity from access seekers in the event it will be required to do so. In supplying their customers, access seekers both roll-out their own IEN infrastructure and buy capacity on Telstra's networks. The ACCC considers that Telstra, if it were efficient, would have the capability to do the same. In the event of an access seeker's financial collapse, or any other event that would cause mass migration back to Telstra (which in itself is unlikely, as there is no reason to believe that other access seekers would not capture significant proportions of affected end users and would all collapse at one time), it should be expected to be able to either utilise its own excess capacity (provisioned for expected future demand), or purchase capacity from a competitor's IEN. Inability to do so would raise concerns over Telstra's own efficiency.

6.3.3. ACCC's view on IEN costs

The ACCC's view, based on its reasons as set out above, is to reject an IEN bypass charge as being inconsistent with the statutory criteria. The ACCC considers that the above discussion made for the purposes of the ACCC's Draft Decision clearly outlines the appropriate application of the relevant criteria to this issue.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in respect to the price terms and conditions that seek to impose an IEN bypass charge, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

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[62] This possibility arises so long as there are increasing returns to scale in the IEN.

The ACCC notes that Telstra has not provided any compelling arguments in response to the ACCC's draft view. The ACCC notes that in its submission Telstra has simply reiterated its previously expressed position.

In summary, the ACCC considers that to the extent the price terms and conditions in the undertakings seek to impose an IEN bypass charge, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

Accordingly the ACCC's view is that the price terms and conditions are not reasonable to the extent they seek to impose an IEN bypass charge.

For further information, please refer to Appendix D.

6.4. Network costs

Telstra has estimated the efficient network costs for 2004-05 using its PIE II model. The efficient network costs for 2005-06 were extrapolated from the 2003-04 and 2004-05 estimates.

The ACCC continues to believe that the PIE II model and its underlying assumptions are unlikely to produce estimates which can be considered reasonable under the statutory criteria. Further, the ACCC believes that Telstra has not provided sufficient justification for the existing model structure in response to previously expressed concerns, nor has it made any adjustments to the model and its underlying assumptions. Accordingly, the ACCC cannot accept an unadjusted PIE II as being capable of producing reasonable estimates of network costs.

However, for the purposes of assessing network costs in the current undertaking, the ACCC has relied to a limited extent on the PIE II model due to the lack of current available alternatives. The ACCC explicitly notes that the reference to the model should not be construed as acceptance that it is reasonable. Rather, the ACCC, having appropriately adjusted the model where this is feasible, considers that the model is only capable of producing extremely conservative upper bound estimates of what are the likely efficient network costs.

In considering the network costs claimed by Telstra the ACCC considers the pricing outcome under the undertaking will achieve less satisfactory outcomes with respect to the statutory criteria than the outcome in the event the undertaking was rejected, which the ACCC considers will likely lead to charges based on more reasonable cost arguments. More particularly, the ACCC considers it is not satisfied that price terms and conditions based on Telstra' claimed costs of the underlying network assets used in the provision of the service are reasonable. In summary, the ACCC considers that

to the extent the price terms and conditions in the undertakings are based on Telstra's claimed network costs, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, or investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

The ACCC's final view, in line with the reasons set out in Appendix E, is to refer to a partially-adjusted PIE II model for the purposes of producing estimates which represent an extremely conservative upper bound of a reasonable estimate of TSLRIC+ network costs for the ULLS. The ACCC's estimates are outlined in Table 6.4.1, incorporating an adjustment following the Draft Decision with respect to network planning costs.

Table 6.4.1 Upper bound of network costs 2004-05 and 2005-06

Band	Telstra's claimed network costs per month ($)	Network cost per month (based on partial ACCC adjustments) [63] ($)
2004-05		
1	4.11	3.61
2	14.89	12.65
3	30.33	27.24
4	160.05	149.37
2005-06		
1	4.09	3.42
2	15.00	11.89
3	30.29	26.11
4	159.05	145.20

As Telstra's claimed network costs lie above this bound, the ACCC's final view is to reject this component of Telstra's Undertaking as being inconsistent with the statutory criteria. That is, the ACCC is not satisfied that price terms and conditions that seek to impose charges based on Telstra's claimed network costs are reasonable.

6.5. Access deficit

The ACCC again reiterates that it is currently its position that there is in fact no AD, and therefore any imposition of an ADC on access services provided by Telstra must be inconsistent with the statutory criteria. However, the ACCC has also rejected an ADC as being inconsistent with the statutory criteria where an AD was found to exist. Accordingly, the existence of an AD is not central to its decision to reject.

The ACCC extensively examined the applicability of an ADC through a public inquiry process initiated by its February 2003 Discussion Paper titled *The Need for an ADC for PSTN Access Service Pricing*. The ACCC's final view on the issue, as set in the *Final Determinations for Model Price Terms and Conditions of the PSTN, ULLS and LCS Services*, was that there was no justification for an ADC. In the ACCC's view, there continues to be no basis for the reopening of this issue.

[63] Estimates produced from running v4.4.2 of PIE II on 16 December 2005 using ACCC adjustments. 2005-06 estimates should be considered indicative only, as they employ estimates produced for 2004-05 and adjusting only for differences in the WACC between 2004-05 and 2005-06.

The LTIE is best promoted by reasonable prices which provide all telecommunications providers with efficient investment signals, while ensuring that competitive neutrality is maintained and Telstra's legitimate commercial interests are met. The ACCC therefore considers that an ADC is not consistent with the LTIE.

In this regard, where an AD is found to exist, the ACCC's analysis (detailed in Appendix B) highlights that an ADC is only one of many mechanisms available for ensuring that the costs of providing non-economic services are met. The analysis demonstrates, with reference to the statutory criteria, why an ADC is inferior relative to other funding mechanisms available and/or already in place.

Subsidy schemes such as the USF are more capable of providing a solution which is sustainable in the longer-term, and display superior properties in terms of competitive neutrality, incentives for efficient investment and recovery of Telstra's costs. Given that this scheme is already in place it is incumbent upon Telstra to demonstrate that its subsidies are insufficient, rather than for the ACCC to intervene to over-rule the Government's decisions on the appropriate level of funding for non-economic services through its decisions on access prices. In any case, such matters should be examined separately to the current undertaking consideration.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

In summary, the ACCC considers that to the extent the price terms and conditions in the undertakings seek to impose an ADC, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- will not ensure Telstra's legitimate business interests are met
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

The ACCC's final decision is to reject an ADC as being inconsistent with the statutory criteria. That is, the price terms and conditions, to the extent they seek to impose an ADC, are not be reasonable.

The ACCC's reasoning in this regard is set out in further detail in Appendix B.

6.6. Non-Price terms and conditions

In the course of its consideration the ACCC has not identified any concerns relating to the non-price terms and conditions which would lead it to the view that those non-price terms and condition were not reasonable.

6.7. Conclusion on consideration of Reasonableness

Based on its assessment pursuant to the criteria relevant under section 152AH of the Act the ACCC forms the view that the price terms and conditions are not reasonable. The ACCC notes it has not identified any concerns with the non-price terms and conditions. The ACCC concludes that the price terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers and the persons who have rights to use the service
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of telecommunications services.

Accordingly, the ACCC is not satisfied that the terms and conditions specified in the undertaking are reasonable.

7. Reasonableness of the proposed LSS monthly charge undertakings

The ACCC cannot accept an undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether the terms and conditions are reasonable the ACCC must have regard to the matters set out in s. 152AH(1) of the Act. The ACCC is not however limited to consideration of just the matters set out in s. 152AH(1) of the Act.[64] Accordingly, the ACCC may have regard to any other matters it believes are relevant to its consideration of whether the terms and conditions are reasonable.

In determining whether particular terms and conditions are reasonable, under section 152AH of the Act, the ACCC must have regard to:

- whether the terms and conditions promote the long-term interests of end-users (LTIE)
- Telstra's legitimate business interests
- the interests of persons who have rights to use the declared service
- 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, a telecommunications network or a facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

Where appropriate and where the ACCC considers it usefully facilitates its consideration of the matters under section 152AH(1) the ACCC has given consideration to the 'future with and without' test, expressed in the Sydney Airports case[65]. Applying this test with respect to particular terms and conditions requires the ACCC to contrast the outcome assuming acceptance of the undertaking against the outcome assuming rejection of the undertaking. The ACCC does not apply this test where it considers it does not helpfully assist it with determining the reasonableness of particular terms and conditions.

This chapter contains the ACCC's conclusions with respect to its consideration of whether the terms and conditions set out in the LSS monthly charge access undertaking are reasonable. The ACCC has conducted its detailed consideration of the terms and conditions under the relevant legislative criteria in the appendices to this decision.

7.1. Summary

While Telstra has not at this stage specifically claimed an additional component for these factors, the ACCC has found that:

- no ADC should be added to the LSS monthly price
- no IEN bypass charge should be added to the LSS monthly price.

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64 Section 152AH(2).

65 *Sydney Airports Corporation Ltd* (2000) 156 FLR 10.

As well, it is not appropriate to levy a charge to recover line related costs through the LSS, given current charges for other fixed network services.

Consequently, reasonable LSS monthly charges consist only of a contribution to specific costs. In this regard, under any reasonable cost recovery approach and taking into account the ACCC's previous views on efficient costs, the proposed charge of $9 is not consistent with the relevant criteria.

It should be noted that while the ACCC had previously considered that a range of between $7-$9 appeared reasonable, on the basis of previously derived cost and demand information which had been submitted as part of the previous LSS assessment in 2003-04, this is not the case when revised demand and cost information is taken into account. This means even if these costs were recovered over all relevant LSS lines as proposed by Telstra, allowing for revised LSS demand estimates and the ACCC's own estimates of efficient costs, would mean the appropriate range of LSS charges would fall to around half of that previously assessed by the ACCC as reasonable.[66] If, however, costs were to be recovered from a broader range of customers including Telstra's own customers, LSS charges would fall even more significantly.

The ACCC does not believe that it is necessary to come to a definitive decision at this stage as to which customers ought to be included because, under any reasonable definition, the appropriate contribution from LSS users would be well below the costs claimed by Telstra and well below the $9 undertaking prices.

Consequently, reasonable specific costs are well below the Undertaking prices and, as a result, Telstra's undertakings are not reasonable.

7.2. LSS-specific costs

In Appendix A the ACCC has conducted its assessment of whether the price terms and conditions contained in the undertakings are reasonable to the extent they seek to impose charges in relation to the claimed LSS-specific costs. In this section of the report the ACCC notes its key findings.

As with ULLS-specific costs, the key question is how costs should be allocated to ensure cost recovery. The ACCC believes that, as with the recovery of ULLS-specific costs, there are compelling arguments under the statutory criteria to spread the costs across a broader range of services.

As outlined above, if the decision is made to spread combined ULLS and LSS-specific costs across all CAN lines, all xDSL lines or some amount in-between, the cost claim made by Telstra will be unreasonable. For the reasons set out in Appendix A, the ACCC believes that it would be preferable to move to a broader cost recovery base and spread the costs across a broad range of users, including Telstra customers.

Further, the ACCC considers that, even if LSS-specific costs were only recovered from LSS users, the costs ought to be recovered over the total project life of 5 years, commencing in the year when the first LSS was sold (2002-03) and ending 2006-07,

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[66] See ACCC, *A Final Report on the Assessment of Telstra's Undertaking for the Line Sharing Service*, August 2004, Appendix 3.

rather than over 4 years of LSS sales, as proposed by Telstra.[67] Using Telstra's own revised demand estimates in its own cost model that uses year average demand estimates, rather than end of year estimates, produces a 'levelised' monthly price significantly below Telstra's proposed monthly price of $9.

Table 7.2.1 LSS specific cost charges under various scenarios [c-i-c]

	LSS specific cost (line/month)
• Required for Telstra's undertakings to be reasonable	[c-i-c]
• all lines that were ever used for LSS (and based on revised demand estimates)	[c-i-c]
• only active LSS lines (based on revised demand estimates)	[c-i-c]

It should be noted that the above figures have been derived using Telstra's own LSS-specific cost model with its own assumptions. The only adjustment made to the model is the addition of the fifth year of recovery of LSS-specific costs. The ACCC notes that it does not endorse the assumptions behind the model (in particular the WACC estimate used by Telstra is substantially above that considered reasonable by the ACCC). Therefore, the above figures should be considered as above upper bounds of possible cost estimates.

7.2.2. ACCC's view on LSS-specific costs

Based on its consideration of the statutory criteria set out in section 152AH the ACCC considers that the price terms and conditions proposed by Telstra are not reasonable to the extent they are based on the LSS-specific costs claimed by Telstra.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

The ACCC concludes that the price terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure

[67] ACCC, *A Final Report on the Assessment of Telstra's Undertaking for the Line Sharing Service*, August 2004, p. 73-74, provides a discussion of the ACCC's views on the asset project life for LSS-specific assets.

- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers and the persons who have rights to use the service
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of telecommunications services.

Accordingly, the ACCC's decision is to reject the LSS-specific costs as claimed by Telstra. The ACCC considers that price terms and conditions based on such costs are not reasonable.

7.3. IEN costs

While Telstra is not actually seeking a contribution to IEN costs from LSS charges at this time, it has reserved its position to claim such costs in the future subject to the ACCC's views on whether the proposed LSS charges are reasonable. This means that Telstra's in principle position appears to be that a contribution to IEN costs is both appropriate and efficient, as outlined in the following extract from their submission:

> In Telstra's view, the costs associated with maintaining the IEN to meet the COLR obligations should be borne by those customers that require Telstra to incur these costs. End users that switch to SSS services are able to switch back to Telstra's PSTN at any time and hence Telstra's COLR obligations require it to maintain the IEN for this eventuality. As a result, an appropriately cost-based SSS charge should include a contribution to Telstra's IEN costs.

This means that it is appropriate for the ACCC to consider this issue. The ACCC believes that the inclusion of IEN costs in an LSS charge is totally inappropriate. LSS is used by access seekers to provide high speed data services such as ADSL. In order for an end user to purchase this service from an access seeker who will supply the service via LSS, the end user must also purchase a full telephony service from Telstra or a resale customer of Telstra. Therefore the end user whose data services are supplied by an access seeker via LSS is already connected to Telstra's PSTN, and is consuming standard telephony services; being charged both monthly access (line rental) and call charges. Telstra is therefore already recovering its IEN costs from such customers to the same extent as its other (non-LSS) PSTN customers.

Alternatively, the access seeker may be supplied standard telephony services via Voice over IP (VoIP), rather than the PSTN/IEN, with the VoIP service provided by the access seeker. Even if that is the case, however, recovery of IEN costs from LSS remains inappropriate. Regardless of the method of call provision (PSTN or VoIP) Telstra will continue to receive basic line rental charges as already outlined; it is only call related revenues associated which could potentially decline. However, the proportion of customers who will use VoIP over the declared LSS is likely to be small.[68] Any detriment to Telstra would be either non-existent or so small that it would be easily outweighed by the lessening of competition due to an imposition of an additional barrier to entry, through higher LSS pricing.

[68] It should be noted that as such customers need to in any case maintain and pay for an analogue (PSTN) line in addition to their broadband connection, the benefits of using a VoIP service to meet all their fixed voice needs are limited.

Further, if the provision of these voice-based services through VoIP is more efficient (in terms of price and/or quality) Telstra's IEN costs clearly are not as efficient and therefore not reasonable under the regulatory criteria, as Telstra has the same opportunity to provide the same services via VoIP in fulfilling its carrier of last resort obligations. This would also apply to VoIP services provided via the LSS or ULLS.

For further information, please refer to Appendix D.

7.4. Shared network costs

The ACCC has previously expressed its position on the inclusion of shared network costs through its pricing principles for the LSS, outlined at the time of declaration. In its most recent LSS undertaking assessment, the ACCC outlined in extensive detail its reservations regarding the inclusion of an allocation of common costs to the LSS service.[69]

The ACCC continues to believe that access prices for the LSS should not be set to recover common costs whilst all other fixed service prices remain unchanged. The ACCC considers that, as Telstra is currently more than capable of recovering in full its line-related costs on the majority of its services, no such mark up is necessary.

The ACCC notes Telstra's argument in the current undertaking that it may well be desirable from an efficiency perspective to include a contribution to common costs. The ACCC has previously stated that:

> …it may be preferable from an efficiency perspective to allocate some line costs to the LSS access price but … this would be dependent on changes being made to the prices of other services.[70]

Thus, in general, the ACCC agrees with Telstra that such an allocation may be preferable in certain circumstances. However, the ACCC considers that the concerns expressed at the time of that report continue to hold, and accordingly preclude the acceptance of any allocation of line costs to the LSS.

Telstra continues to earn revenues in excess of those required to fully recover line costs across a range of services provided via the CAN. Accordingly, it is difficult to justify the inclusion of a common cost charge on the LSS which may lead to additional profitability for Telstra.

However, Telstra maintains that it is currently incurring a loss (known as the AD) on its CAN costs.[71] The ACCC continues to believe that Telstra's calculation of any AD and its application to access charges is incorrect (see Appendix B).

Telstra therefore is unlikely to require any mark-up on the LSS to ensure cost recovery under the current circumstances. However, as noted above the ACCC does consider that the allocation of some CAN costs to the LSS would be appropriate if there was some form of price re-balancing of existing charges.

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[69] ACCC, *A Final Report on the Assessment of Telstra's Undertaking for the Line Sharing Service*, August 2004, pp. 30-33.

[70] *Ibid*, p. 30.

[71] Telstra, *Telstra's Submission in Support of the SSS Monthly Charges Undertaking Dated 13 December 2004*, 13 December 2004, p. 19.

The ACCC has previously noted that it does not directly regulate the prices of all services provided by Telstra. Thus, given the current level of over-recovery by Telstra of CAN costs, it cannot ensure that any increase in prices to the LSS as a result of partial allocation of CAN costs would result in corresponding decreases to Telstra's other prices.

The ACCC extensively outlined its concerns in applying efficiency based mark ups in accordance with Ramsey-Boiteux pricing constructs in the previous undertaking assessment. The ACCC considers that implementation of Ramsey-Boiteux pricing methods is extremely difficult as a practical matter, and that information of sufficient quality and timeliness is likely to be unavailable, particularly given that the relevant parameters are likely to change over time. Further, the ACCC notes that Ramsey prices can be set at any level ranging from cost recovery to full monopoly exploitation, and therefore, there is no certainty the Ramsey Boiteux pricing will lead to socially optimal Ramsey-Boiteux prices. Accordingly, the ACCC has not and does not support moves towards the use of Ramsey-Boiteux pricing in relation to the recovery of common costs.

The ACCC considers therefore that an allocation of CAN costs to the LSS as proposed in the undertaking cannot be justified at this stage under the relevant statutory criteria.

7.5. Other factors

Telstra's submission in relation to the LSS discusses the applicability of an ADC, and recovery of any shortfall in emergency services funding. However, Telstra does not appear to be claiming any component of their monthly LSS charges relate to these two areas, according to the breakdown of LSS elements.[72]

Accordingly, the ACCC does not consider that it is required to form a view on the appropriateness of Telstra's raising of these two areas as potential cost items, however it reserves the right to do so at a later stage should Telstra make any such claims. However, the ACCC briefly observes that:

- as noted above in section 6.5 and in Appendix B, the ACCC continues to believe that the AD no longer exists, and that in any case application of an ADC to the LSS would be inconsistent with the statutory criteria
- Telstra has not adequately established the reasoning behind why it would seek to recover emergency services costs from the LSS.

7.6. Non-Price terms and conditions

In the course of its consideration the ACCC has not identified any concerns relating to the non-price terms and conditions which would lead it to the view that those non-price terms and condition were not reasonable.

7.7. Conclusion on consideration of Reasonableness

Based on its assessment pursuant to the criteria relevant under section 152AH of the Act the ACCC forms the view that the price terms and conditions are not reasonable. The ACCC notes it has not identified any concerns with the non-price terms and conditions. The ACCC concludes that the price terms and conditions:

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[72] *Ibid*, p. 6.

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers and the persons who have rights to use the service
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of telecommunications services.

Accordingly, the ACCC is not satisfied that the terms and conditions specified in the undertaking are reasonable.

Appendix A. ULLS and LSS specific costs

A.1. Introduction

A.1.1. What are ULLS and LSS specific costs

The 'specific' costs of the ULLS and LSS services are those costs incurred by Telstra to allow for supply of the declared services. The costs typically consist of:

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

Previously the ACCC has agreed to Telstra recovering specific costs directly from those access seekers making use of the services. When applying that approach, two issues are of importance: the quantum of costs efficiently incurred to provide the service, including a return on capital; and the appropriate level of service demand over which to spread the costs. In its discussion paper relating to these Undertakings, the ACCC again raised these two points, but also requested comments on the more fundamental question of whether specific costs ought to be recovered from a broader range of services.[73]

A.1.2. ACCC's Draft Decision

In its Draft Decision the ACCC concluded that:

- it is appropriate to recover specific costs from a larger customer base than that proposed by Telstra
- ideally, it is appropriate to recover specific costs from the largest related customer base possible—including Telstra's customer base—and this means that Telstra's cost claim of $10 is not reasonable
- even if it were not appropriate to recover the costs from the largest related customer base possible, it is appropriate to recover the costs from all ADSL services and this means that Telstra's cost claim is not reasonable
- even if it were not appropriate to recover costs from all ADSL services, it is appropriate that they be recovered from all lines that have ever been taken as a ULLS or LSS service and that, when combined with a more efficient estimate of costs incurred, Telstra's cost claim is not reasonable
- regardless of the method of cost recovery chosen, Telstra's cost estimates are unlikely to be reasonable; however, this only becomes a determinative factor in relation to the more narrow cost recovery methods.

Given these findings, the ACCC concluded that, overall, a reasonable charge for specific costs is significantly below Telstra's estimate and consequently its claims in regard to specific costs, and more particularly the terms and conditions in the

[73] ACCC, *Telstra's Undertakings for the Unconditioned Local Loop Service: Discussion Paper (public version)*, March 2005, p. 19.

undertaking relating to imposing a charge to recover the specific costs as claimed by Telstra, are not reasonable.

A.1.3. Possible means of recovery of ULLS and LSS specific costs

The ACCC has previously allowed Telstra to recover all of its costs directly from the services in question (i.e. ULLS and LSS). For example, where the efficient ULLS-specific costs were deemed to be $*F* and a reasonable estimate of demand for ULLS to be *D*, the ACCC allowed Telstra to recover the amount $*F/D* from each service.

This approach has however been controversial and difficult to apply. Access seekers have argued that the specific costs are not directly attributable to the services in a strict sense and the difficulties of forecasting service demand in a growing market has led to significant uncertainty. Consequently, in its *Discussion Paper*, the ACCC raised the possibility that the costs may be recovered from a more broadly defined service. The ACCC raised several alternative ways in which costs may be recovered. In its Draft Decision, the ACCC outlined that costs may be recovered from:

A. only actual services—i.e. an estimated number of services in the future
B. all those lines which have ever been a ULLS or LSS service
C. all lines which are used as DSL lines
D. all those lines which are DSL capable
E. all CAN lines which may reasonably be used for a ULLS or LSS service[74]
F. all CAN lines.

Options A and B involve spreading the ULLS and LSS costs only over those lines which have been used for the respective services. Options C – F, however, involve spreading the combined ULLS and LSS specific costs over all or most of the services in question.

It is worth noting quickly how options C – F work. Using F as an example, if combined specific costs were $*F* and the total number of CAN lines were *C*, then option F, for example, would involve access seekers paying an additional $*F/C* per line, while Telstra would have the option to recover the remaining specific costs by raising its retail prices by the same amount—$*F/C*.

A.2. Assessment of Telstra's and other approaches against regulatory criteria

In its Draft Decision, the ACCC contrasted Telstra's favoured approach to recovery of ULLS specific costs to other approaches under relevant regulatory criteria. The ACCC has given consideration to Telstra's additional claims in support of its preferred approach, which are addressed in Appendix F below, however in considering the arguments the ACCC remains of the view that distributing ULLS-specific costs over all DSL or all CAN lines are both superior to Telstra's approach under regulatory criteria. More importantly, having regard to the statutory criteria, the ACCC does not consider that the terms and conditions proposed by Telstra in its undertakings with respect to seeking recovery of the claimed ULLS specific costs are reasonable. Telstra's responses have not demonstrated why recovering these fixed

[74] It is not clear to what extent this option would simply duplicate option D.

costs only over a very narrow range of lines is consistent with the criteria. That said, even under a ULLS lines approach, Telstra's current price proposals remain unacceptably high.

It is important to note that under any of the approaches proposed by both Telstra and the ACCC, the ULLS-specific costs (including the return on investment) are fully recovered. Therefore, Telstra's legitimate business interests are met. However, Telstra's approach of spreading costs over the proposed narrow range of lines is not reasonable having regard to the statutory criteria. The ACCC notes that the option of spreading specific costs over all CAN (or all DSL) lines is superior under other regulatory criteria. In light of these findings the ACCC will accordingly be looking to review its previously stated approach to ULLS pricing in due course.[75] While Telstra claimed the ACCC's view reflects a reversal of its previously stated position, the ACCC has made clear in its model prices for core services determination, that ULLS specific costs should only be recovered using the ULLS-only approach until the end of 2004-05, followed by an inclusion of these costs in a TSLRIC+ estimate.[76] Including specific costs in a TSLRIC+ estimate effectively distributes these costs over all lines.

When the ULLS was first made available, in 2000-01, the ACCC was cautious in its approach to the way specific-costs should be recovered and formed an initial view that these costs could be recovered over ULLS lines. The ACCC has been reluctant to move away from this construct during the expected period of cost-recovery as this was likely to impose unnecessary regulatory risk to both Telstra and other providers. The ACCC, however, as early as in its model terms and conditions determination in 2003, noted the desirability of moving to a different construct and considered the first real opportunity to do so was at the end of the initial five year investment period. This does not represent any sudden or arbitrary change in the ACCC's approach. It is a change that has been carefully signposted over several assessment processes and arguably represents a more than generous period of cost recovery to Telstra for the recovery of these costs.

From a pragmatic perspective, the ACCC notes that annual ULLS and LSS specific costs combined amount to less than 0.05 per cent of Telstra's annual revenue. On the other hand, distributing these costs over the broadest possible range of customers would result in a ULLS price that is approximately **[c-i-c]** less than that proposed by Telstra's undertakings.

The discussion in this section of the appendix refers to the ULLS but applies equally to the LSS.

A.2.1. Criteria for assessment

The ACCC must not accept an access undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether particular terms and conditions are reasonable, the ACCC must have regard to the matters relevant under

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[75] The ACCC is about to embark on a review of various fixed line services, including the ULLS, under current sun-setting provisions at which time it will also be required to consider the appropriate pricing principles for these services.

[76] ACCC, *Final Determinations for Model Price Terms and Conditions of the PSTN, ULLS, and LCS Services*, October 2003, p. 80.

section 152AH. Notably, section 152AH(1) of the Act specifically requires the ACCC to have regard to:

- whether the terms and conditions promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services (the long-term interests of end-users)
- the legitimate business interests of Telstra, and its investment in facilities used to supply the declared services
- the interests of all persons who have rights to use the declared services
- the direct costs of providing access to the declared services
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

This chapter contains the ACCC's assessment as to whether the price terms and conditions are reasonable to the extent they seek to require access seekers to fully pay the ULLS and LSS-specific costs claimed by Telstra.

In considering the various criteria in s. 152AH, the ACCC will apply, where appropriate, the 'future with and without' test expressed in the Sydney Airports case.[77] This test requires the ACCC in considering particular terms and conditions to contrast the outcome under the section 152AH criteria in the event the undertaking was accepted against the outcome in the event the undertaking was rejected. The ACCC does not consider that the 'future with or without' test will assist the ACCC in assessing all of the reasonableness criteria, and the ACCC will only apply the test to criteria where it facilitates the ACCC's analysis. Relevantly, in having regard to these matters, the ACCC has considered whether either acceptance or rejection of the undertaking (with its price terms and conditions based on the relevant cost claims made out by Telstra) would achieve better outcomes with respect to the criteria set out in section 152AH. Ultimately the ACCC is required to form a view whether it considers the particular terms and conditions are reasonable.

With respect to considering the outcome under rejection of the undertaking, the ACCC notes a number of alternative pricing outcomes might arise. All procedures and protections provided for in Part XIC in respect of declared services will be available to access seekers who wish to acquire the service. Access seekers may continue to seek to determine terms and conditions of access via commercial negotiation. Division 8 of Part XIC of the Act gives the ACCC power to arbitrate access disputes. The ACCC has made its views on appropriate price terms and conditions clear to industry. The ACCC considers these views are likely to influence industry in respect to achieving commercial or regulatory outcomes. The ACCC appreciates that given commercial imperatives for certainty and the costs involved with pursuing a regulatory outcome, an access seeker will in some instances negotiate an access price higher than it believed could be obtained using regulatory means.

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[77] *Sydney Airports Corporation Ltd* (2000) 156 FLR 10.

A.2.2. Promotion of the LTIE

In assessing whether particular terms and conditions are reasonable the ACCC must have regard to whether those terms and conditions promote the LTIE of end-users of carriage services or services supplied by means of carriage services. In determining whether the terms and conditions in an undertaking promotes the LTIE, the Act requires the ACCC to have regard to the extent to which the terms and conditions in the undertaking are likely to result in:

- the achievement of the object of promoting competition in markets for listed carriage services
- the object of achieving any-to-any connectivity in relation to carriage services that involve communications between end-users
- the objective of encouraging the economically efficient use of, 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.[78]

To assist with the ACCC's assessment as to whether the terms and conditions promote the LTIE and are likely to result in the achievement of the objectives referred to above, the ACCC has given consideration to whether acceptance of the terms and conditions set out in the undertaking would better promote the LTIE than a decision to reject the undertaking. This type of analysis is commonly referred to as applying the 'future with and without' test.[79] In giving effect to this particular analysis, the ACCC has compared the likely outcome if the undertaking was to be accepted against the likely outcome in the event the undertakings were rejected.

A.2.3. Promotion of competition

Direct assessment

The ACCC recognises that competition is a process of rivalry and that the degree to which it is promoted by a particular pricing principle is difficult to observe. Consequently, in assessing the impact on competition, the ACCC tends to have regard to the *outcome* of competition from the consumer's perspective.[80] That is, the ACCC will assess the prices and qualities likely to prevail in the market under different pricing principles. The pricing system likely to lead to an outcome most closely approximating a perfectly competitive[81] market will be deemed to promote competition to the greatest extent.[82]

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[78] The Act was recently amended to provide for consideration of the efficient investment in any other infrastructure by which listed carriage services are, or are likely to become, capable of being supplied. See the Telecommunications Legislation Amendment (Competition and Consumer Issues) Act 2005.

[79] Seven Network Limited (No.24) [2004] ACompT (23 December 2004).

[80] See for example, ACCC, *Declaration of Local Telecommunications Services*, July 1999, p. 74.

[81] Or potentially perfectly contestable.

[82] This discussion uses a test more closely related to perfect contestability. That is prices should be as close to average cost as possible, but no less than average cost.

Competition tends to be a limiting process; the greater the number of competitors the smaller the gap between price and cost. A lower bound on long run prices, however, is the average costs of the second last competitor.[83] No competitive process will lead to sustained pricing which will not enable at least two competitors to survive in the market. It is clear that the average costs of the second last competitor will be lower when the all lines (or all xDSL lines) approach is applied rather than the ULL lines approach.

To see this, consider the case where the ULLS-specific costs are $\$x$ and line costs are $\$y$. Suppose further that there are 10 ULL lines and 100 CAN/DSL lines. If ULLS-specific costs are spread over the 10 ULL lines, then the cost per line for Telstra will be $\$y$ while the costs per line of access seekers will be $\$y + x/10$. Competition will, at best, push prices down to $\$y + x/10$ and Telstra will earn a profit of $\$ x/10$ per line.

However, if ULLS-specific costs are spread across all CAN/DSL lines, then access seeker average costs and Telstra average costs will be the same and equal to $\$y + x/100$. Thus the limiting competitive price will be $\$y + x/100$.

The all lines approach therefore leads to an outcome which more closely approaches a competitive outcome and it is possible to conclude that spreading ULLS-specific costs over all or all DSL lines will have a greater impact on price competition than spreading it only over ULLS lines.

It remains to show that spreading ULLS-specific costs across all DSL or all lines will have a greater or equal impact on quality of services that are able to be provided than will spreading specific costs only over ULLS and that it is preferable to not declaring the service.

In assessing the likely effect on quality, it is sufficient to note that there is no compelling evidence to conclude that the ULLS lines approach will lead to a higher level of innovation. There are two conflicting incentives at work.[84]

Under the all/DSL lines approach, average costs for Telstra and access seekers are equal or closer together than with the ULLS lines approach. Consequently, an innovation by one group threatens the ongoing profitability of the other. This market structure is likely to lead to innovation as all market participants wish to avoid the costs of being left behind. Under the ULLS lines approach, Telstra has lower average costs. This implies that it is able to 'wait and see'— avoid innovating and wait instead to observe the actions of others, using its profits as a buffer. These facts tend to indicate that the all/DSL lines approach is superior in encouraging innovation.

Conversely, under the ULLS lines approach, Telstra will be insulated from the potential losses associated with innovation. Consequently it may find it easier or less risky to engage in innovation. This would suggest that the ULLS lines approach better encourages innovation.

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[83] To see this, suppose that there are two competitors A and B. Suppose that A has an average cost of supply of 1 and B an average cost of supply of 2. There would be no reason for A to price below 2 in the long-run. It may do so in the short run, but that would precipitate the exit of B.

[84] For the purposes of this discussion it is assumed that quality increases when a firm 'innovates'. That is, takes an existing idea and spends the money to implement it. This is to be differentiated from a process of invention, where a firm may spend large amounts on developing new technologies. It seems unlikely that Telstra or other providers are spending substantial amounts on developing their own technology.

Weighing these two effects is likely to be complicated and speculative. It is, therefore, impractical to judge between the two options based on this criterion. The ACCC would merely note that the two approaches are at the very least neutral with respect to innovation and quality impacts.

Finally, competition will be promoted by the ULL if end user prices are lower than they would be without declaration so long as they do not fall below cost. The example above shows that either approach will lead to prices which are at or above cost. So long as $\$y + x/10$ is below the monopoly price, competition will be promoted by either approach.

Competitive neutrality

The ACCC has also stressed the importance of competitive neutrality in the competitive process. It has been argued that this can have two broad interpretations. The first is that the competitive process will not favour either provider and the second is that the two parties will be 'indifferent' between being the access seeker and access provider. This second criterion has been termed – by NECG – 'the indifference principle'.[85]

In assessing the first requirement, Gans and King have shown that competitive neutrality can only be maintained if both Telstra and its competitors have the same marginal costs of service.[86] This, however, cannot be maintained by either construct discussed above. Telstra will *always* face lower effective marginal costs than the access seeker, because it does not consider the specific costs when coming to a pricing decision. Consequently it will benefit in the competitive process regardless of the ACCC's decision, so long as there is some contribution to ULLS-specific costs within the ULLS price, whatever the magnitude.

The indifference principle can only be met if all reasonable competitive processes will lead to the access seeker and Telstra earning the same profit in the long run.[87] The level of profits will be determined by two things, marginal cost and average cost. Most models of a competitive process indicate that a firm with higher marginal costs will have a market share smaller than or equal to its competitor. Overall profit is determined by multiplying market share by the mark-up over average cost which will be the same for both competitors so long as they sell homogenous products. Therefore, the higher the marginal cost and the higher the average cost, the lower the profit.

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[85] H. Ergas, *Discussant Remarks – ACCC Regulation and Competition Conference, Session 2: Competitive Neutrality: Regulating Interconnection Disputes in the Transition to Competition*, July 2002.

[86] See, J. S. Gans and S. P. King, *Competitive Neutrality in Access Pricing*, 31 May 2004. Also, William Tye argues that competitive neutrality occurs when the most efficient supplier will be the victor in 'winner takes all competition'. See W. B. Tye, *Competitive Neutrality: Regulating Interconnection Disputes in the Transition to Competition*, Paper presented at the ACCC's Regulation and Competition Conference, July 2002. Under this construct Telstra will always be the winner regardless of the actions of the ACCC because it does not consider specific costs as relevant to the pricing decision while access seekers do.

[87] In the short run Telstra will tend to earn more profit so long as prices are above average cost because it has more customers.

As the ULLS only approach will lead to a situation where *both* marginal and average costs are higher for the access seeker, it can never obey the indifference principle. The all/DSL lines approach on the other hand will lead to a higher marginal cost for the access seeker but equal or close to equal average costs. Thus, while the all/DSL lines construct may not obey the indifference principle, it will come closer than the ULLS lines construct.

It can therefore be concluded that neither construct will lead to a competitively neutral market, but that the all/DSL lines construct comes closer. This also means the all/DSL lines construct will better promote competition.

As the ACCC's analysis shows (see Appendix F), if accepted, Telstra's undertakings would set a price for ULLS and LSS above the cost of provision of these services. Alternatively, if the ACCC rejects Telstra's undertakings, access seekers and Telstra may arrive at a negotiated outcome. However, if agreement cannot be reached, parties may apply to the ACCC for an arbitration. In that instance, the ACCC is likely to set prices for the provision of services that equal costs. As indicated by the ACCC's analysis, regardless of the approach the ACCC follows in setting cost equivalent prices, these prices would be below Telstra's undertakings prices, and closer to actual cost of provision.

The actual cost of provision is the cost that Telstra itself faces when supplying downstream services. As a result, any outcome resulting from rejection of Telstra's undertakings would in this instance be preferable to the acceptance of Telstra's undertakings, since rejecting the undertakings will result in greater equivalence between costs faced by Telstra and access seekers.

A.2.4. Any to any connectivity

This criterion is not directly relevant to the consideration of cost recovery approaches for the ULLS and LSS.

A.2.5. Economically efficient use of, and economically efficient investment in, the infrastructure by which listed services are supplied

Telstra's legitimate commercial interests

As shown above, either approach will ensure that Telstra is able to recoup the costs of its investment in ULLS. Further, Telstra will have both marginal and average costs which are at or below the costs of access seekers. There is therefore *no* appropriately conceivable reasonable competitive process which could lead to it being unable to recoup its costs.

Investment in infrastructure, including in new infrastructure

Efficient investment will occur so long as efficient projects earn a reasonable market return, the investor has the appropriate incentives to invest efficiently and the market is characterised by the requisite degree of certainty.

As shown above, either pricing approach will lead to a market or greater return on Telstra's investment in ULLS-specific systems.

In addition, the all/DSL lines construct will give Telstra stronger incentives to invest in efficient technology. Suppose Telstra has *x%* of customers, then, for every one hundred dollars saved in ULL specific costs, Telstra will make a saving of $*x*. Given that *x* is likely to be high, this is a high powered incentive scheme. If, however, the ULL lines construct is used, then there is an incentive for Telstra to increase its

specific costs to be recovered by access seekers. As demonstrated above, Telstra will make a *minimum* per line profit which is equal to the average ULL-specific cost which the ACCC accepted (x/10 in the previous example) consequently, the higher is x the higher is Telstra's profit.

Further, the all lines method creates a greater degree of pricing certainty. The total number of CAN lines is both relatively stable and large in comparison to the ULLS-specific costs. Even the use of all DSL-capable lines provides greater certainty in this regard. Thus, the access price will remain relatively stable using the all/DSL lines method. The number of ULL lines by contrast is small and unstable and a small percentage change in the number of lines will lead to a large change in the price. As it is well recognised that certainty is important for investment, the all/DSL lines method is likely to promote access seeker investment in alternative infrastructure. This incentive will extend to nearly all investment in infrastructure based competition, and even to Telstra. This is because greater certainty of ULLS pricing will mean that it is easier for all investors to assess the relative strength of different investment proposals.

Consequently the all/DSL lines methodology will lead to more efficient investment by Telstra in the ULLS-specific project and to more efficient investment by access seekers in DSLAM roll-outs and alternative technologies. It is therefore to be preferred under this limb of the reasonableness criteria.

In addition, in terms of Telstra's incentives to invest in any alternative technology and infrastructure, such as deeper fibre deployment or wireless, the all/DSL lines approach does not prevent or inhibit Telstra from making efficient build decisions in this regard. In contrast, to the extent that Telstra earns a higher (or monopoly) profit from the ULL-lines construct, it may have fewer incentives to invest in alternative platforms.[88]

A.2.6. Legitimate business interests

The ACCC has determined that legitimate interests extend to earning a normal, risk-adjusted return on investment but do not extend to continuation of monopoly profits. A normal commercial return will be guaranteed by the all/DSL lines construct. The ULLS lines construct on the other hand will essentially push a wedge between Telstra's costs and other operators' costs and will lead or maintain the ability of Telstra to earning a return greater than a normal commercial return.

Consequently the all/DSL lines methodology is to be preferred under this limb of the reasonableness criteria.

A.2.7. The interests of persons who have rights to use the declared service concerned

Access seekers have the right to use the ULLS service. Part of this right must extend to the reasonable belief that they can compete through the use of the service. As shown in the example above, under the ULLS-lines construct Telstra will face average service costs significantly below the access seeker. Consequently, Telstra

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[88] It may be possible to characterise Telstra's recently-announced plans to install a FTTN network in a benign sense as a way for it to compete more vigorously with other DSL-based providers relying on ULLS or LSS. This is consistent with the above point. An alternative view is to characterise such an investment is as a means of stranding existing ULLS deployments.

could price at a point below the average costs of the access seeker while still making a profit. This would have the effect of forcing the access seeker out of business and would breach its right to make use of the service.

The all lines construct on the other hand would mean that Telstra could not pursue such a strategy without pricing below its own average costs and consequently making a short term loss. It seems, therefore, that the all/DSL lines construct will make it less likely that the access seeker's ability to use the service will be hampered in this way.

Further, it seems reasonable to argue that access seekers have a right to be free of unnecessary risk. In this context, the access price generated by the ULLS lines method is highly sensitive to demand estimates. The higher demand the lower the price. This creates unnecessary risk for the access seeker. First, the profitability of any investment will depend, to a greater extent than is usual, on the actions of other competitors. For example, were no other access seekers to take up ULL it would tend to inflate the price and reduce profitability. Second, it means that the access seeker is, more than usual, open to actions taken by Telstra. Were Telstra to take steps to reduce the demand for ULL through non-price behaviour, this would impact negatively on the access seeker. Overall, the all/DSL lines method leads to a price which is stable over time and provides greater certainty for the access seeker.

Consequently the all lines methodology is to be preferred under this limb of the reasonableness criteria.

A.2.8. The direct costs of providing the service

This section of the act ensures that those who benefit from the service pay the costs associated with providing the service. It coincides with the economic notion that the end-user—or the beneficiary—should pay. In assessing the level of direct costs associated with providing a service, the ACCC has determined that the TSLRIC+ method is the most appropriate.

The implementation of this requirement depends on the definition of the 'service' which is used in both the regulatory criteria and the TSLRIC definition. It is therefore necessary to decide what the service is in the case of the ULLS-specific costs.

It is convenient to argue by analogy. In the case of PSTN terminating service, the 'service' provided is the termination of a telephone call. It has direct benefit to the consumer and consequently the consumer should pay for it. This is ensured so long as the party billing the consumer pays the costs associated with ensuring that the termination is possible – that is the access seeker should pay the network costs.

In the case of ULLS-specific costs, however, it is less clear what the service is and who benefits. The ULLS-specific costs do not provide any service which is directly valued by consumers—it seems reasonable to say that there is no direct consumer demand for ULLS specific services. Equally, the service does not directly provide value to the access seeker because, in a competitive environment, they will not profit from the service. Rather the ULLS-specific costs create the *possibility* that lines will be transferred between Telstra and access seekers. The service provided, therefore, is the *potential* for competition. This is to be contrasted with the ULL lines costs which provide the *means* for competition.

The user-pays principle then requires that the beneficiaries of this 'potential' pay for it. The ULLS-system may have competitive effects in two distinct areas. First, if ULLS is used to provide both voice and data, the beneficiaries will be the users of *all*

telephone services. This characterisation suggests that the specific costs should be spread over all lines. Second, ULLS may only provide for competition in broadband services. If this is the case, then the beneficiaries are all broadband users and the specific costs should be spread across all xDSL enabled lines.

There are strong reasons for believing that the ULLS will have an impact on both ADSL and telephony prices. First, it is likely that ULLS access seekers will provide both voice and broadband. Given the low incremental costs of providing a voice service once DSLAMs are installed and IEN arrangements made, it seems that ULLS access seekers will use the technology to provide voice even to customers not currently taking ADSL. Second, ULLS will allow a greater competitive impact through VoIP even if access seekers do not provide a traditional voice service.

Consequently, the potential to switch lines between carriers created by the ULLS service leads to lower consumer prices and increased quality of *all* telephone services, it seems clear that the beneficiaries are *all consumers using the CAN*. Consequently, this regulatory criterion would indicate that all consumers connected to the CAN should contribute to the ULLS-specific costs.

As Optus has argued, the service provided by the ULLS is the correction of a market failure. This correction leads to real benefit for all telephony consumers, whether they are connected to Telstra's or another's network.[89] Consequently the costs should be spread across all CAN lines.

Either approach will ensure that all Telstra's costs of providing the service are met and, because the all lines approach fits more clearly with the relevant service description, it is to be preferred under this regulatory criterion.

At this stage the ACCC would refrain from making a definitive decision on whether the all-lines or most (DSL) lines approach should be used. That said, there is a strong conceptual case for the all-lines approach under this criterion and in a practical sense the difference between these is empirically quite small.

It is also necessary to determine what is the relevant cost to spread over all lines. It seems clear that both LSS and ULLS specific costs can be seen as costs incurred to create the potential for consumers to move between different providers. Telstra, however, also incurs other costs in providing wholesale services. For example, Telstra currently has a system—known as LOLO—which provides billing for wholesale products such as ADSL and this system is also used for LSS. Telstra may seek to recover these costs also from the ULLS and LSS prices. However, it is the ACCC's view that most of these costs are not part of the direct costs of providing the potential to switch between providers. Rather these are the costs which are associated with Telstra providing wholesale services. Access seekers would incur similar additional costs if they choose to provide a wholesale service. Consequently, each party should recover its (non-LSS) wholesale costs from its wholesale customers only.

There may, however, be some costs which are incurred by Telstra which should properly be recovered from the ULLS and LSS charges. For example, it may be appropriate for Telstra to recover the costs of IT equipment which allows it to keep track of the location and operation of lines etc. The ACCC, however, does not have

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[89] The benefits flow to Telstra's customers in the form of cheaper better quality services provided by Telstra because of the greater levels of competition.

any details of such costs. In any case, these are network costs and should be included in this category rather than recovered as part of a surcharge. Consequently, it seems likely that the ULLS and LSS specific costs are the only costs which need to be spread over all lines and indeed network costs are already allocated and recovered in this way.

A.2.9. Operational and technical requirements

The ACCC does not consider that there are any issues relating to operational and technical requirements that require consideration in this context.

A.2.10.Economic efficiency

Allocative efficiency

Allocative efficiency is achieved when consumer prices are set at marginal cost.[90] As this is not possible in the current context two principles can be applied. First, prices should deviate as little as possible from marginal cost and second, if possible, price deviations should be concentrated on market segments where demand elasticity is low—the Ramsey-Boiteux pricing approach.

As shown above, the ULLS lines approach leads to a situation where *all* prices deviate from cost by a greater amount than the all lines approach. Equally, the ULLS lines approach is no more likely than the all lines approach to implement Ramsey efficient pricing.

It can further be argued that the smallest reduction in consumer surplus will be achieved where the costs of the ULLS-specific investment are spread over the widest possible group of consumers. That is, all CAN lines should bear a share of the costs.

It is worth commenting here on one argument consistently made by Telstra. It suggests that allocative efficiency requires that the consumer taking a ULL pay the costs of the ULLS-specific investment because they are the ones who 'caused' it and they are the ones who 'benefit' from it. As discussed above, the consumer using a ULL does not benefit to any greater or lesser extent than do all market participants. The 'cause' of the ULLS-specific costs is the regulatory regime which deems it necessary to correct for market failure.

It is therefore possible to conclude that the all lines approach is superior from the perspective of allocative efficiency to a ULLS-lines approach.

Productive efficiency

Productive efficiency is achieved when the relevant service is produced at its lowest costs. As noted above, the all lines approach has a superior incentive structure and will likely lead to greater productive efficiency. In fact, the ULL lines construct is likely to be highly inefficient and to encourage not only over expenditure but also considerable rent seeking.[91]

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[90] The ACCC interprets 'marginal cost' in terms of TSLRIC, rather than some short-run notion.

[91] In fact, this rent seeking can already be observed in the amount of time and effort Telstra has put in to arguing for a higher ULL specific cost.

Dynamic efficiency

As noted above, there is little difference between these approaches in terms of innovation and new services. If anything, however, the buffer provided by the ULL lines approach may lead to delayed investment by Telstra.

A.3. ULLS and LSS-specific costs under Telstra's approach

As indicated above, the option of distributing ULLS and LSS-specific costs over either all DSL or all lines is superior to Telstra's methodology of distributing ULLS-specific costs over only ULLS lines, under the regulatory criteria. Under those two approaches, the total per line cost of provision of ULLS and LSS is substantially lower than the prices proposed in Telstra's undertakings.

For completeness, however, it is worth examining the per line quantum of ULLS and LSS-specific costs if they were to be distributed, as Telstra claims, over only ULLS and LSS lines respectively.

A.3.1. LSS-specific costs

Telstra now believes that LSS-specific costs should be recovered over a four year period ending in 2005-06, rather than the original five year period ending in 2006-07. To that end, its consultant, CRA, states that:

> The current levelisation period should not extend beyond 2005/06 as this would unnecessarily increase the risk of cost under- or over-recovery[92]

The ACCC finds this explanation unsatisfactory. To simply ignore contributions of users of LSS-specific systems in the fifth year of assets' life is inappropriate. To do so would result in an expected over-recovery of LSS-specific costs (under unbiased estimates of LSS demand).

Under Telstra's own expected demand assumptions, including the 2006-07 demand in calculating LSS-specific costs, reduces these to a level where per line costs are less than proposed undertaking prices.

A.3.2. Amount of ULLS-specific cost

In determining the level of ULLS-specific costs, the ACCC continues to rely on the CMPI/AAS assessment of these.[93]

Telstra's submission to the ACCC's discussion paper raises issues concerning the CMPI/AAS report and submits that the ACCC should not accept the report's findings.

Telstra first notes that the CMPI/AAS report was conducted in 2001 and should now be disregarded as the report sought to estimate future costs whereas information on Telstra's actual expenditure is now available.[94] The ACCC does not consider that this necessarily means that the CMPI/AAS report should be disregarded. In particular, the ACCC notes that the CMPI/AAS report sought to estimate the efficient costs of

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92 H. Ergas, *Expert Report on ULLS and SSS Specific Cost Models – Levelisation (Public Version)*, CRA International, May 2005, p. 14.

93 CMPI and AAS, *Review of Telstra's ULLS-specific Costs – Final Report*, 12 October 2001; and CMPI and AAS, *Review of Telstra's ULLS-specific Costs – Draft Report*.

94 Telstra, *Public Version of Telstra's Submission in Response to the Australian Competition and Consumer Commission's Discussion Paper in Respect of ULLS Received March 2005*, May 2005, p. 7.

provision and also adjusted for initiatives which could not be reasonably allocated to the ULLS. The ACCC considers that Telstra has not presented evidence that it has incurred efficient costs, or adjusted for non-ULLS initiatives, in its ULLS specific cost calculations.

Telstra also criticises the CMPI/AAS report approach to connection group costs.[95] Telstra rejects the suggestion that an efficient ULLS provider could handle up to 200,000 connections per year with only 10 or 20 staff. Telstra instead quotes its current connection processes where Telstra's connection group make 14.4 connections per staff member per day.[96] This is closer to the half an hour per connection estimated by CMPI/AAS when there is 'extensive manual processing'.[97] However the ACCC considers that Telstra's figures ignore the efficiencies of greater automation that CMPI/AAS submitted an efficient provider would incur.

Telstra also criticises the CMPI/AAS report finding that wholesale product management costs would fall over the life of the ULLS project.[98] Telstra argues that:

> product management work activities for any product are typically influenced by the particular life cycle stage of the product. ULLS is currently on the cusp of the growth stage.[99]

However the ACCC notes firstly that this qualitative position about cyclicality is not supported by Telstra's quantitative modelling, which indicates a constant level of product management costs of $480,000 per annum for all years. Secondly the ACCC notes that Telstra has not provided any updated information[100] to that provided to CMPI/AAS at the time of the CMPI/AAS report.[101]

Overall, the ACCC does not consider that the issues raised by Telstra cause the ACCC to change its position in relation to the CMPI/AAS report. The ACCC does not consider that Telstra has presented any submissions that cause the CMPI/AAS report recommendations to be invalid.

A.3.3. Appropriate cost recovery periods

Even if ULLS-specific costs were to be recovered from ULL services alone, the original recovery period for ULLS-specific costs ends in 2004-05 and a new 5-year period should start with 2005-06. Therefore, demand expected over that period should be considered when unitising the costs.

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95 *Ibid*., p. 10.

96 *Ibid*., also [**c-i-c**], *Statement of [**c-i-c**]*, 25 May 2005, p. 7.

97 CMPI and AAS, *Review of Telstra's ULLS-specific Costs – Draft Report*, p. 28

98 *Ibid*., p. 11

99 *Ibid*., p. 11

100 While Telstra has provided the [**c-i-c**] statement, that statement is largely descriptive in relation to wholesale product management costs.

101 CMPI and AAS, *Review of Telstra's ULLS-specific Costs – Final Report*, 12 October 2001, p. 20.

Telstra has claimed that it expects to lose 1.8 million lines over the next three years.[102] That demand alone would reduce the ULLS-specific cost sufficiently to a level that is very close to that derived under the all/DSL lines construct.

For example, if over the three-year period 2005-06 to 2007-08 (i.e. a period two years shorter than the life of ULLS-specific investment), demand for ULLS was say 500,000 in 2005-06, 1,000,000 in 2006-07 and 1,800,000, the recovered amount under Telstra's proposal would be approximately $396 million ((500,000 + 1,000,000 + 1,800,000) x 12 x $10), and not **[c-i-c]** which is the actual ULLS-specific cost. Spreading **[c-i-c]** over that demand would result in a ULLS-specific cost of approximately **[c-i-c]** per month.

Through its undertaking and submission, Telstra has attempted to revise its approach when the original approach did not provide a desired outcome. ULLS specific asset life is five years. The five year period ends in 2004-05 – half way through the undertaking. However, since ULLS take-up was lower than expected Telstra wants to extend the recovery period of this cost *ex post*. This is inconsistent with ex-ante pricing adopted as consistent with reasonableness criteria.

A.3.4. Treatment of historic profits/losses

Telstra wishes to include in the ULLS-specific costs what it considers the historic under-recovery of ULLS-specific costs. The under-recovery occurs only if it is accepted that ULLS-specific costs should be recovered only over ULLS-specific lines, because of previous demand estimates not eventuating.

Telstra accounts for this by including actual ULLS demand in the ULLS-specific cost model, rather than previous unbiased demand estimates.

Historic profits/losses should not be accounted for in current pricing

Telstra's consultants claim that:

> the extent of historic under or over recovery of costs can be considered when setting future access prices to ensure that over the entire project life (encompassing historic and future periods) costs are just recovered. This is most likely to be important where it is known that substantial cost under-recovery has occurred in earlier periods due to the regulator adopting over-optimistic demand forecasts, as has been the case for both the ULLS and SSS.[reference omitted]
>
> Depending on the circumstances, setting a levelisation period for future prices that encompasses the periods over which historic profits and losses are incurred can ensure those past losses and profits are recovered. This method may provide a more balanced exposure of risk between access seekers and the access provider than the alternatives discussed.[reference omitted] Furthermore, for start-up services for which significant up-front fixed (i.e. volume invariant) costs are involved, it is common commercial practice to smooth prices over a number of years rather than simply reflect in early period prices the very high annual unit costs that reflect low demand levels. In a regulatory context, setting the levelisation period to encompass past profits and losses would in effect mimic this approach in access pricing.[103]

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[102] Senate: Environment, Communication, Information Technology and the Arts Legislation (ECITA) Committee, *Estimates (Supplementary Budget Estimates)*, 31 October 2005, p. 123.

[103] H. Ergas, *Expert Report on ULLS and SSS Specific Cost Models – Levelisation (Public Version)*, CRA International, May 2005, p. 7.

It may be common that a contract entered into at the beginning of the provision of a service with high fixed costs will have price that is smoothed or levelised over the life of the contract. An up-front cost can be distributed equally over the expected demand over the life of the contract (or asset). However, it is very unlikely that a contract would have a provision whereby the acquirer of services agrees to pay for the losses the provider of services may have incurred in providing these in the past.

As with the proposed extension of the ULLS-specific cost recovery period, considering historic profits or losses relates to *ex post* adjustments, which would insulate Telstra from any risk regarding ULLS-specific costs to the detriment of its competitors. It is also inconsistent with *ex ante* pricing that has been adopted by both the ACCC and Telstra.

A.3.5. Effect of extended recovery period and inclusion of historic profits/losses

Both the extension of the recovery period and the inclusion of the recovery of historic profits/losses serve to insulate Telstra from risks associated from the provision of ULLS, at the expense of access seekers.

Telstra claims it still faces risk that 2005-06 demand will not be realised. However, if Telstra's arguments are accepted, there is nothing to stop it extending the recovery period for yet another year, thereby shifting its risk to the access seeker again. In addition, Telstra could again ask to recover what it sees as unrecovered historic losses due to forecast errors, again shifting the risk onto access seekers. Further, this may create a 'self-fulfilling prophecy' whereby high ULLS cost result in low ULLS take-up, which in turn results in continued high ULLS costs and so on.

However, Telstra has not proposed submitting undertakings that reimburse access seekers if actual demand outstripped expected demand, or that distribute any historic profits to access seekers.

A.3.6. ULLS-specific costs under Telstra's methodology

However, and notwithstanding its lack of support under the legislative criteria, even if it were appropriate for the historic profits/losses to be accounted for, and even if it was appropriate for the levelisation period to be extended to six years, ending 2005-06, when properly calculated, ULLS-specific costs combined with network costs amount to materially *less* than prices proposed by Telstra's undertaking.

If Telstra's ULLS-specific cost of **[c-i-c]** was to be distributed and recovered over all lines that were ever ULLS, even by recovering until end of 2005-06, the ULLS-specific cost is **[c-i-c].**

As a result, prices proposed by Telstra's undertaking in bands 1, 2 and 3 (which, is where the majority of ULLS take-up is expected) are clearly above the cost of provision of ULLS in those bands.

A.4. Assessment of ULLS and LSS-specific costs under Telstra's approach

The above analysis is two-fold. First, it shows that Telstra's approach to distributing ULLS and LSS-specific costs over only ULLS (or LSS) lines is inferior to either distributing these costs over all DSL or all lines. As a result, its approach is unreasonable under the criteria.

Second, under **any** approach to distributing ULLS and LSS-specific costs, which includes Telstra's approach, the cost of provision of ULLS and LSS are below the

prices proposed by Telstra's undertakings in the more significant bands where DSL developments are likely to be most concentrated[104]. To illustrate this, consider the costs and proposed prices of ULLS in Band 2, where the majority of ULLS demand is expected.

Table A.4.1. ULLS specific cost charges under various scenarios [c-i-c]

	ULLS specific cost (line/month)	ULLS Band 2 Network costs (line/month)	Proposed Band 2 ULLS charge
• Required for Telstra's undertakings to be reasonable	[c-i-c]	[c-i-c]	[c-i-c]
If specific cost distributed over:			Total Band 2 cost
• all DSL capable lines	[c-i-c]	[c-i-c]	[c-i-c]
• all DSL lines	[c-i-c]	[c-i-c]	[c-i-c]
• all lines that were ever used for ULLS (and based on revised demand estimates)	[c-i-c]	[c-i-c]	[c-i-c]
• only active ULLS lines (based on revised demand estimates)	[c-i-c]	[c-i-c]	[c-i-c]

Note: The above figures are approximate based on actual and estimated demand for ULLS, LSS, ADSL and basic access services.

As noted in section A.3.1, LSS specific cost, when calculated over the appropriate period, is below the price proposed by Telstra's undertakings. The ULLS-specific cost charge, implied by the undertaking price, which is higher than the cost of provision, is not reasonable under statutory criteria. Similarly, the undertaking price which is higher than the cost of provision of the service is also not reasonable under statutory criteria.

Such a price will not promote competition as it will give the access provider an advantage in provision of downstream services.

Further, while pricing above cost of production does allow for full recovery of direct costs of providing a service, as well as accounting for legitimate business interests of the access provider, it includes an additional economic profit component, beyond that considered reasonable. Such a component is not necessary to satisfy Telstra's legitimate business interests and is clearly not in the interest of persons who have the

[104] Telstra has indicated that there will be 1.8 million lines taken up over the next three years in Band 2. See: Senate: Environment, Communication, Information Technology and the Arts Legislation (ECITA) Committee, *Estimates (Supplementary Budget Estimates)*, 31 October 2005, p. 123.

right to use the declared service (access seekers). Pricing at the cost of production, however, would satisfy these criteria.

Allocative efficiency is not achieved when marginal revenue (i.e. in this instance, the price) is set above marginal cost. Similarly, productive efficiency is not achieved as pricing above costs encourages inefficient expenditure and rent-seeking. Finally, dynamic efficiency is likely to suffer as regulated pricing above cost could reduce the incentives to innovate.

A.5. The ACCC's Final view

Based on its consideration of the statutory criteria set out in section 152AH the ACCC considers it the price terms and conditions proposed by Telstra are not reasonable to the extent they are based on the ULLS and LSS-specific costs claimed by Telstra.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

The ACCC concludes that the price terms and conditions:

- are unlikely to promote the LTIE, as they will not encourage the economically efficient use of, and investment in infrastructure and will not promote competition
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers and the persons who have rights to use the service
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of telecommunications services.

Accordingly, the ACCC's decision is to reject the ULLS and LSS-specific costs as claimed by Telstra. The ACCC considers that price terms and conditions based on such costs are not reasonable.

Appendix B. Access Deficit

B.1. Introduction

Issues surrounding the addition of an access deficit contribution (ADC) to core services access prices—particularly PSTN origination and termination (PSTN O/T) prices—have dominated regulatory proceedings on these services in recent years. In a letter of 14 November 2003,[105] Telstra stated that acceptance of Telstra's 2003 core services Undertakings by the ACCC would lead it not to

> claim an ADC increment in regulatory proceedings regarding the price for any of the Undertaking Services for the 2006-07 financial year and beyond …

However, Telstra included four bases on which this commitment rested. Of particular relevance here is the following:

> The commitment does not constitute an acknowledgement that an access deficit will not exist in 2006-07 or subsequent years or that Telstra's claim in respect of the ADC … is not or would not be valid.

While the ACCC had previously allowed an ADC to be added to the PSTN O/T price, its review of the ADC in 2003 led it to the view that the inclusion of an ADC is inconsistent with the long term interests of end users (LTIE).[106]

B.1.1. Criteria for assessment

The ACCC must not accept an access undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether particular terms and conditions are reasonable, the ACCC must have regard to the matters relevant under section 152AH. Notably, section 152AH(1) of the Act specially requires the ACCC to have regard to:

- whether the terms and conditions promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services (the long-term interests of end-users)
- the legitimate business interests of Telstra, and its investment in facilities used to supply the declared services
- the interests of all persons who have rights to use the declared services
- the direct costs of providing access to the declared services
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

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[105] Letter from Bill Scales to Ed Willett, Access Deficit Contribution ('ADC'), 14 November 2003.

[106] Following the release of the ACCC's Discussion Paper (ACCC, *The Need for an ADC for PSTN Access Service Pricing*, February 2003), it received ten submissions from interested parties: Telstra (151 pages including confidential materials); Primus Telecommunications (48 pages); Optus (41 pages); n/e/r/a for Optus (33 pages); CoRE Research (33 pages); AAPT (8 pages); PowerTel (7 pages); Macquarie Corporate Telecommunications (6 pages); ATUG (5 pages); and Comindico (3 pages). The ACCC's response was contained in ACCC, *Final Determinations for Model Price Terms and Conditions of the PSTN, ULLS and LCS Services*, October 2003, Ch. 8.

This chapter contains the ACCC's assessment as to whether the price terms and conditions are reasonable to the extent they seek to require access seekers to pay an ADC.

In considering the various criteria in s. 152AH, the ACCC will apply, where appropriate, the 'future with and without' test expressed in the Sydney Airports case.[107] This test requires the ACCC in considering particular terms and conditions to contrast the outcome under the section 152AH criteria in the event the undertaking was accepted against the outcome in the event the undertaking was rejected.. The ACCC does not consider that the 'future with or without' test will assist the ACCC in assessing all of the reasonableness criteria, and the ACCC will only apply the test to criteria where it facilitates the ACCC's analysis. In this case the ACCC has given consideration to the "future with and without test" with respect to matters relating to the LTIE (under section 152AH(1)(a)), the interests of persons who have rights to use the service concerned (under section 152AH(1)(c)), and the economically efficient operation of the service (under 152AH(1)(f)). Relevantly, in having regard to these matters the ACCC has considered whether acceptance of the undertaking (with its price terms and conditions) based on the relevant cost claims made out by Telstra) would better achieve those outcomes under section 152AH.

With respect to considering the outcome with respect to rejection of the undertaking the ACCC notes a number of alternative pricing outcomes might arise. All procedures and protections provided for in Part XIC in respect of declared services will be available to access seekers who wish to acquire the service. Access seekers may continue to seek to determine terms and conditions of access via commercial negotiation. Division 8 of Part XIC of the Act gives the Commission power to arbitrate access disputes. The ACCC has made its views on appropriate price terms and conditions clear to industry. The ACCC considers these views are likely to influence industry in respect to achieving commercial or regulatory outcomes. The Commission appreciates that given commercial imperatives for certainty and the costs involved with pursuing a regulatory outcome, an access seeker will in some instances negotiate an access price higher than it believed could be obtained using regulatory means.

In evaluating the case for an ADC, assessment of whether an access price satisfies LTIE is based on the matters established as relevant under section 152AB(2) of the Act.

In considering the matters it must have regard to in reaching its decision the ACCC's decision was largely influenced by the following six main considerations:[108]

- achieving more efficient use of telecommunications infrastructure
- achieving more efficient investment in telecommunications infrastructure
- having regard to the legitimate business interests of access providers
- the promotion of competition
- the interests of persons who have rights to use the declared service

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[107] *Sydney Airports Corporation Ltd* (2000) 156 FLR 10

[108] The other main criterion, achieving any-to-any connectivity, is neither enhanced nor reduced by altering the ADC and is therefore not relevant to this debate.

- the direct costs of providing access.

The following criteria were not considered significant to the analysis of whether the price terms and conditions were reasonable (to the extent they imposed an ADC):

- achieving any-to-any connectivity
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility.

Separately to its consideration of PSTN O/T issues, the ACCC has previously rejected the inclusion of an ADC in ULLS Undertakings as being inconsistent with the regulatory criteria. However, Telstra as part of this Undertaking process has again sought the imposition of an ADC on the ULLS. The ACCC's Discussion Paper raised for comment the issue of the appropriateness of an ADC on the ULLS.[109]

B.2. Telstra's position

Telstra submits that an AD exists:

> Telstra's PIE II model indicates that there is a deficit between the TSLRIC of the CAN and the total revenue raised (or which could be raised) from customer access charges and the universal service fund.

Telstra defines the AD as being the total shortfall between CAN costs as estimated by the PIE II Model, and the sum of potential customer access charges and USO funding. On this basis Telstra submits that the ACCC's position that an AD does not exist is not correct.

Telstra therefore submits that it is in the LTIE to recover this deficit from all users of the CAN, including access seekers utilising the ULLS. In doing so, Telstra appeals to the economic concepts of economic efficiency and competitive neutrality.

Telstra relies in this regard on expert analyses prepared to support its arguments by CRA International (CRAI). CRAI's most recent expert report endeavours to show that, under a specific set of circumstances:

> If Telstra is required to set prices for basic access (and other charges for connection to the Customer Access Network ("CAN") below a relevant standard of cost, recovering the shortfall through prices of call services provided by means of the CAN, then economic efficiency and competitive neutrality would require that access seekers who provide such call services using the CAN also contribute to the recovery of the shortfall.[110]

CRAI then sets out to show that economic efficiency and competitive neutrality would be served by the inclusion of an ADC on the ULLS.

B.3. Other industry stakeholders

All other submissions to the Discussion Paper reject that it is appropriate under the relevant statutory criteria to include an ADC. AAPT states that:

> … AAPT does not believe that Telstra should be allowed to recover … an Access Deficit Contribution (ADC)… We submit that there is no new evidence or changed industry

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[109] ACCC, *Telstra's Undertakings for the Unconditioned Local Loop Service – Discussion Paper*, March 2005, pp. 22-24.

[110] H. Ergas, *Expert Report on Access Deficit (Public Version)*, CRA International, May 2005, p. 1.

> circumstances that would support a departure from the Commission's previous assessment that an ADC is not reasonable.[111]

Macquarie Telecom states that:

> The attempt by Telstra to reintroduce the now stale argument over access deficit contributions … is nothing more or less than a transparent attempt by Telstra to 'game' the regulatory process. The ADC argument has been traversed extensively in the past and, seemingly, resolved. As a result of rebalancing, to the extent an access deficit ever existed, it has now clearly been erased. The attempt to re-raise this issue is clearly an attempt to increase the level of regulatory uncertainty to the detriment of access seekers and should be unequivocally rejected.[112]

Optus states that:

> Optus agrees with the ACCC's [previous] assessment that it would accordingly be inappropriate to allow Telstra to charge access seekers an ADC on ULL wholesale prices.
>
> Including an access deficit component on the ULL service could distort investment in potentially competitive markets, which would in turn harm the long term interests of end users. [113]

B.4. The ACCC's draft view

The ACCC's draft view was that it believes that following extensive line rental rebalancing, and adopting a more holistic approach to the revenues and costs of the CAN, the AD does not exist.

In any case, even if an AD could be shown to exist, the ACCC believes that the inclusion of an ADC on the ULLS would be inconsistent with the relevant statutory criteria as it would distort both competition and investment outcomes. This reaffirms the ACCC's previous decision in relation to the removal of the ADC from PSTN O/T prices.

B.5. Responses to the ACCC's draft view

With the exception of Telstra, respondents agreed with the ACCC's draft view on the ADC.

The Competitive Carriers' Coalition stated that:

> The CCC is disturbed that Telstra continues to present arguments to allow it to recover an access deficit. The case for the access deficit was always one that the CCC considered dubious, but the steep increases in line rentals that Telstra has enjoyed in recent years as part of the process of rebalancing, as well as growth in services, efficiency improvements and new sources of revenue available to it over the copper, should have long ago consigned these arguments to being of historical relevance only. Aside from that the ACCC clearly indicated in 2003 in its report Model Price Terms and Conditions report that an argument to retain the Access Deficit no longer exists. For

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[111] AAPT Limited, *Submission by AAPT Limited to the Australian Competition and Consumer Commission in response to Telstra's Undertakings for the Unconditioned Local Loop Service & Telstra's Undertakings for the Line Sharing Service*, May 2005, p. 3.

[112] Macquarie Telecom, *Macquarie Telecom's Response to Telstra's Undertakings on the Unconditioned Local Loop Service*, 1 June 2005, p. 4.

[113] Optus, *Submission to Australian Competition and Consumer Commission on Telstra's ULLS Undertakings*, May 2005, p. 21.

> Telstra to include an access deficit here is clearly intended to undermine the ACCC's findings.[114]

Macquarie Telecom stated that:

> As previously stated, Macquarie agrees that the ADC component is inconsistent with the statutory criteria and that no access deficit exists.[115]

However, Telstra disagrees with the ACCC:

> The Draft Decision rejects Telstra's submission on the ADC on the grounds that Telstra makes sufficient profits across other service to bear these costs. For the same reasons as enumerated above in the context of ULLS specific costs, Telstra submits that the Commission's rational [sic] is inconsistent with the statutory criteria.[116]

B.6. The ACCC's assessment of an ADC

The ACCC has previously analysed issues surrounding the definition and identification of any AD in considerable depth. Previously the ACCC found that the inclusion of an ADC was inconsistent with the legislative criteria, and hence it was removed from access prices for PSTN O/T from 2003-04 onwards.[117]

Telstra has submitted for an ADC in the context of these Undertakings. The following section the ACCC gives considerations to the existence of an AD and whether the price terms and conditions in the undertaking are reasonable to the extent they seek to impose a charge for an ADC.

B.6.1. The existence of an Access Deficit

The AD is only likely to arise in circumstances where, due to regulatory constraints, Telstra is unable to cover an appropriate definition of its costs with an appropriate definition of revenues. For example, as set out in the 1999 Undertaking Assessment, there was potential for an AD to arise if competition developed to the extent that prices of PSTN related products were pushed down a point insufficient to cover the costs of providing a full PSTN service. However, the expected circumstances under which the original ADC could have been justified have failed to eventuate. In particular, the ACCC notes that:

- line rentals price controls have been substantially relaxed, particularly since 2002, allowing substantial line rental increases
- the CAN is now capable of providing a significantly wider range of services than those being provided at the time the 1999 Undertaking was assessed.

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[114] Competitive Carriers' Coalition, *Submission to the ACCC Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, August 2005, pp. 4-5.

[115] Macquarie Telecom, *Response to Draft Decision on Telstra's ULLS and LSS Monthly Charges*, 12 September 2005, p. 1.

[116] Telstra, *Telstra's Submission in response to the ACCC's "Assessment of Telstra's ULLS and LSS Monthly Charge Undertakings – Draft Decision" dated August 2005*, 23 September 2005, ¶ 20.

[117] As previously noted, in order to avoid undesirable shocks to users of the PSTN OTA service, a transitional charge was instituted in its place, progressively scaling down to TSLRIC+ prices by 2006-07.

Line rental

The relaxation of line rental price controls was specifically implemented to allow Telstra to rebalance its charges and remove the ADC from interconnect prices. The then Minister observed that:

> If you are going to fix the problem of the access deficit and get your interconnect prices down by about a third, you need to gradually rebalance.[118]

Telstra was thus given greater freedom in retail price controls from 2002-03 onwards to facilitate this outcome. It has been allowed to increase line rentals by an amount equal to the change in the CPI plus 4 per cent per annum (CPI+4), a rate of increase designed to allow elimination of the AD by 2006-07.[119]

Services

The original definition of the AD only took into account revenues attainable from line rental charges and PSTN voice services. In general, the ACCC has more recently adopted a more holistic approach in assessing Telstra's ability to recover its costs over the wider range of services available across the CAN. Further, the increased adoption of xDSL, which is also provided over the CAN and not subject to cost-based regulation, now represents a substantial source of additional revenue to Telstra and serves to widen the ACCC's holistic approach.

In light of the availability of these services, the ACCC believes that the AD as previously defined is no longer relevant. Telstra appears to argue that the appropriate common cost to be recovered is any shortfall between line rentals and allocated line costs. However, in considering the arguments put forward by Telstra, the ACCC continues to believe that the relevant common cost is the CAN, not the AD.

Adopting an efficient mark-up approach, as Telstra appears to be advocating would lead to mark-ups across all services which use the CAN, not solely those services related to basic access as proposed by Telstra.[120] This would necessarily include services such as xDSL services, which clearly utilise the CAN for their provision. Inclusion of all services is likely to result in more optimal outcomes, as explicitly stated by Telstra:

> If each separate wholesale price makes an appropriate contribution to shared CAN costs, consumption decisions are least distorted, and welfare is maximised.[121]

This position is confirmed by CRAI, which argues earlier in its expert report that:

> …while there is a range of possible approaches to the assessment of responsibility for common costs, it would be very unusual to find an approach that did not impute to substantial services… any responsibility for contribution to common costs.[122]

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[118] Senate: Environment, Communication, Information Technology and the Arts Legislation (ECITA) Committee, *Consideration of Supplementary Estimates*, 20 November, 2002, p. 10.

[119] However, as discussed in the 2003 Final Determinations, the higher line costs estimated by the PIE II model compared with the n/e/r/a model (and compared with the RAF and PIE I) would imply that the Government's allowance would not result in the achievement of this objective.

[120] Assuming that no services have perfectly elastic demand, and that there is not a significantly complementary relationship between any two services (in terms of market demand).

[121] Telstra, Telstra's submission in support of the SSS monthly charges undertaking dated 13 December 2004, 13 December 2004, p. 14.

[122] H. Ergas, *Expert Report on Access Deficit (Public Version)*, CRA International, May 2005, p. 8.

The ACCC agrees with this statement by CRAI, and considers that this reflects its current position that the common costs of the CAN are recovered over all services which utilise it.

However, the ACCC has concerns regarding the specific application of efficiency based mark ups in accordance with Ramsey-Boiteux pricing constructs. The ACCC considers that implementation of Ramsey-Boiteux pricing methods is extremely difficult as a practical matter, and that information of sufficient quality and timeliness is likely to be unavailable, particularly given that the relevant parameters are likely to change over time. Further, the Commission notes that Ramsey prices can be set at any level ranging from cost recovery to full monopoly exploitation, and therefore, there is no certainty the Ramsey-Boiteux pricing will lead to socially optimal Ramsey-Boiteux prices. Accordingly, the ACCC has not and does not support moves towards the use of Ramsey-Boiteux pricing in relation to the recovery of common costs.

Accordingly, the ACCC maintains its current position that, in the absence of regulation of all services provided over the CAN, an analysis of whether Telstra is earning sufficient revenue over all services to cover the common costs of the CAN is the most appropriate way of determining whether there is an unrecoverable common cost due to the imposition of retail price controls.

Conclusion

The ACCC believes that any appropriate consideration of potential shortfalls in recovery of the costs of the CAN should explicitly take into account the significant extent of rebalancing in line rental charges which has and will continue to take place, and the wider array of services now available over which the costs of the CAN can be attributed. The ACCC previously rejected the continuation of an ADC on the PSTN O/T service in 2003 on the basis of an analysis conducted for it by Ovum, as well as its own internal analysis of Telstra's profitability. Given the substantial changes identified, the ACCC sees no reason to consider that this analysis has been invalidated since this time. The ACCC notes that more recent figures on profitability of Telstra's network, produced by it for the purposes of its *Digital Compact* presentation to Government, demonstrate continuing EBITDA margins across the range of fixed voice services between 54 per cent and 88 per cent, as well as an EBITDA margin on data services of 39.5 per cent.[123] Further, an analysis conducted by ABN Amro indicates that Telstra's EBITDA margin is the second highest of the 17 major incumbents studied, and further that even its 'lowest' EBITDA margin, on data services, is above the average overall EBITDA margin for these 17 incumbents.[124]

On this basis, the ACCC concludes that Telstra is more than capable of recovering its costs. Telstra continues to invest in ADSL and CAN related services in light of the ACCC's 2003 decision to disallow the ADC, indicating that Telstra itself believes it will continue to make positive returns over the CAN.

The ACCC considers that the determination of the existence or otherwise of an AD is a threshold matter. Where an AD does not exist, it is clearly inconsistent under the statutory criteria for an ADC to be included in access prices. Significantly, price

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[123] Telstra, *The Digital Compact & National Broadband Plan*, 11 August 2005, p. 11.

[124] ABN Amro, *Telecommunications Services*, 12 October 2005, Table 6, p. 26.

terms based on such a claim would not be in the LTIE, nor be consistent with the commercial interests of Telstra and the interests of persons who have rights to use the service. The Commission believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that do not account for an access deficit and which better promote the LTIE, and are more consistent with the interests of users and economic efficiency.

The ACCC notes however that its analysis of the reasonableness of price terms and conditions that impose an ADC is not necessarily dependant on determining the existence or otherwise of an AD. Telstra has stated that:

> The Commission's conclusion relies on the assumption that Telstra earns high economic profits and these can be used to cover the access deficit so in effect it does not exist.[125]

The ACCC's analysis of the reasonableness of an ADC under the statutory criteria is not dependent on the determination that an AD no longer exists. While it remains the ACCC's position that the AD no longer exists, the ACCC has also assessed Telstra's claim for an ADC on its merits based on the assumption that it does.

B.6.2. Assessment of the ADC under the legislative criteria

The ACCC has conducted its assessment under the statutory criteria set out in section 152 AH of the Act. In forming its views against these criteria the ACCC notes that its views were largely influenced by its consideration of the following main considerations:

- achieving more efficient use of telecommunications infrastructure
- achieving more efficient investment in telecommunications infrastructure
- having regard to the legitimate business interest of access providers
- the promotion of competition
- the interests of persons who have rights to use the declared service
- the direct costs of providing access.

The following criteria were not considered significant to the analysis of whether price terms and conditions that imposed an ADC would be reasonable:

- achieving any-to-any connectivity
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility.

As noted above, it is the ACCC's view that an ADC is inappropriate under the statutory criteria where no AD exists. Accordingly, the following analysis under the criteria is conducted with reference to Telstra's claim that it continues to exist.

B.6.3. Achieving more efficient use of telecommunications infrastructure

There is little guidance in section 152AB of the Act as to what is meant by economically-efficient use of telecommunications infrastructure. Therefore, this is

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[125] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, p. 23.

interpreted in standard economic efficiency terms of moving prices closer to underlying costs to achieve a closer matching of users' valuation of the services, at the margin, with the cost to the economy of providing those units.

The imposition of an ADC on access services acts as a barrier to the movement of prices towards underlying costs, to the detriment of economic efficiency. This point is readily acknowledged by CRAI on behalf of Telstra:

> Of course, the imposition of an ADC is not costless. The ADC… causes [users] to consume less of those services than full allocative efficiency would require.[126] (CRAI, p. 1)

The ACCC's position remains that the removal of the ADC has enhanced allocative efficiency by removing part of the wedge separating price (reflecting willingness to pay) from the underlying cost of provision.

Telstra has not presented any new evidence to suggest that the inclusion of an ADC in ULLS pricing is consistent with enhanced efficiency in the use of telecommunications infrastructure. As the ACCC no longer allows an ADC on PSTN OTA services, the inclusion of an ADC on the ULLS is unlikely to achieve more efficient use of telecommunications infrastructure.

B.6.4. Achieving more efficient investment in telecommunications infrastructure

This criterion has been interpreted by the ACCC as providing incentives for Telstra to make economically-justifiable investments in the PSTN and to ensure access seekers face an appropriate build/buy choice.

As the ULLS price is set to allow recovery of the TSLRIC+ costs of the line, Telstra and access seekers face the correct incentives to continue to invest in all lines on which the ULLS is taken. Accordingly, any distortion to TSLRIC+ introduced by a charge such as an ADC is likely to distort the investment decisions of access seekers by promoting inefficient investment in alternative facilites.

In responding to the ACCC's arguments outlined below with respect to competitive neutrality, Ergas has clarified his previous statement by stating that he was in fact referring to Telstra's ability to lower wholesale prices, not retail prices. However, in identifying the long-term effects of his clarified argument, Ergas correctly identifies the inconsistency of any ADC with the LTIE with respect to efficient investment incentives. Ergas states that:

> Indeed if access seekers were able to avoid making a contribution by threatening by-pass, Telstra would have to bear more of the access deficit. For example, if Telstra did not lower wholesale prices, then inefficient bypass would occur leading to competition forcing lower retail prices and Telstra would lose both wholesale and retail revenues. If, more realistically, Telstra lowered wholesale prices to the level where inefficient bypass was no longer attractive, competition would still force down retail prices, but at least Telstra would lose only the difference between the original and the subsequent wholesale prices, rather than the entire wholesale price.[127]

Ergas has identified that bypass, and even the threat of bypass, must drive prices down to levels which would deter inefficient bypass; that is, prices which include no

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[126] H. Ergas, *Expert Report on Access Deficit (Public Version)*, CRA International, May 2005, p. 1.

[127] H. Ergas, *Response to Inaccurate Citations by the ACCC of Previous Expert Reports by Henry Ergas*, September 2005, p. 6.

ADC. This concurs with the ACCC's conclusions that prices which include any ADC must necessarily depart from those which best promote incentives for efficient investment in infrastructure.

It is noted that through TSLRIC+ pricing as applied to the ULLS, Telstra will face the correct investment incentives on all lines on which the ULLS is capable of being taken out, absent an ADC.[128] In fact, Telstra will be faced with sufficient incentives to invest in not only taken and potential ULLS lines, but all lines on which it is capable of earning at least a normal commercial return as measured across the range of services which can be provided on those lines. It is only on lines on which Telstra can reasonably expect to be making a loss where it will not face the correct incentives to make economically-justifiable investments. However, Telstra is only likely to continue to be providing such lines on a forward-looking basis due to its obligations as a Universal Service Provider. Accordingly, funding to correct Telstra's incentives on this subset of lines should be sourced from the Universal Service Fund (USF), or some other form of explicit, external funding arrangement.

The ACCC acknowledges that there is currently a level of concern within the industry over the adequacy of the USF funding mechanism. However these concerns underpin the need for an appropriately constructed funding mechanism, rather than a justification for a secondary funding system such as an ADC, which may be associated with greater economic distortions. Further, the ACCC has significantly more confidence in the ability of an independently administered fund to achieve the objectives of Universal Service Provision, given its continuing concerns over alternative funding mechanisms such as an ADC. The ACCC therefore continues to believe that an ADC cannot promote efficient investment in infrastructure.

B.6.5. Telstra's legitimate business interests

Access pricing must have regard to Telstra's legitimate business interests. This is interpreted as allowing Telstra to cover its efficient costs from the totality of its retail and wholesale pricing, having regard to the ability to exploit economies of scale and scope, while not allowing Telstra to pursue interests which are not considered legitimate, such as monopoly pricing.

Where an AD exists, an ADC is not likely to ensure that Telstra's legitimate business interests are met. As identified by Ergas above, where Telstra is faced with bypass, or even the threat of bypass, it is likely to lower its access prices to deter inefficient bypass. A conclusion which logically follows from Ergas's analysis is that, in these circumstances, Telstra will be incapable of recovering any AD except to the extent that it can raise its own retail prices to do so. Accordingly, where bypass is feasible, or even where access seekers can make credible threats of bypass under Ergas's construction, Telstra's legitimate business interests are less likely to be met by an ADC.

The reasons for this are straightforward. An ADC can best be characterised as an imperfect taxation regime designed to recover a shortfall generated by Telstra on the provision of a subset of its services which are non-economic. It is an imperfect tax

[128] Where it is currently the case, or can be reasonably anticipated, that sufficient revenues are capable of being earned on the ULLS line for take-up to be a viable proposition.

primarily because it is imposed solely on Telstra's access and (under Telstra's construction) its retail services.

In asking for an ADC, Telstra is in effect asking for the full burden of supplying these non-economic services to be imposed upon its network alone, and claims that the ACCC's approach would impose the burden on it alone:

> Imposing the burden of recovering the access deficit on Telstra and Telstra alone would be inconsistent with competitive neutrality. It would result in distortions to competition and investment that are contrary to the long-term interest of end-users.
>
> Requiring Telstra to fund all of the access deficit is inconsistent with Telstra's legitimate business interests…[129]

Telstra's preferred approach, as identified, continues to impose the burden of funding non-economic services on its own network, albeit via access services as well as retail services. In effect, Telstra does not appear to consider that there are, or will ever be, effective substitutes to its access services. Its analysis is therefore limited solely to a consideration of potential discrepancies between its retail services and access seekers.

Where Telstra's services face no effective substitutes, such an imposition poses less serious concerns with regard to Telstra's ability to recover its costs. However, as correctly identified by Ergas, where effective substitutes either do exist, or can be credibly 'threatened' to be developed, the imposition of an ADC is not likely to be effective in ensuring Telstra's costs are recovered. That is, an ADC is an imperfect tax, as it does not capture the full range of current, or potential future substitutes which may exist for Telstra's access services. Even where such substitutes are limited, or geographically contained, Telstra's ability to recover its legitimately incurred costs must be harmed.

Accordingly, the access regime is not an effective mechanism for any attempt by Telstra to seek redress for any net costs imposed upon it associated with the provision of non-economic services in accordance with Government social objectives. Only mechanisms which are capable of capturing the range of current and potential substitutes (ie. alternative networks) for Telstra's services are capable of providing Telstra with a fund to ensure its costs are met. An ADC does not fulfil this requirement. More appropriate mechanisms via which to fund these services lie outside the access regime - the USF and/or direct Government subsidies provide more efficient solutions to this issue.

Indeed, the Government has extensively considered the funding requirements for uneconomic services provided by Telstra, and established the USF and other subsidy arrangements for this very purpose. Accordingly, a clear case can be made that policy makers have carefully considered the best means by which Telstra is to meet its social policy objectives, and provided appropriate funding for it to viably do so. Even if an AD in excess of that funded by the USF was identified, it would be clearly inappropriate for the ACCC to try to meet such a shortfall through a separate and imperfect funding mechanism, such as an ADC, and in a way that may not be fully consistent with the Government's determination on this issue. Such issues should be considered separately. Further, as already outlined, the access regime cannot be used effectively to correct any such shortfall.

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[129] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, p. 22.

Where Telstra believes that the USF and other programs are insufficient to meet its legitimate business interests, its appropriate response is to address its arguments to the administrators of the USF and/or the Government, rather than submitting for the ACCC to impose a mechanism which is unlikely to be sustainable or justifiable in terms of the LTIE. As this analysis shows, the ACCC cannot ensure through such a mechanism that Telstra's legitimate costs can be recovered, even where a shortfall was proven to exist.

B.6.6. The promotion of competition

Broadly, the ACCC regards anything that promotes (damages) competition, everything else being equal, as enhancing (damaging) the LTIE.

The ACCC has on various previous occasions commented on the issue of 'competitive neutrality' and how this may be affected by the imposition or lack of an ADC. It has been pointed out that it appears to be the case that Telstra does not apply an internal transfer pricing system and that it is therefore incongruous for Telstra to appeal to 'competitive neutrality' with respect to its rivals.

However, Telstra continues to contend that competitive neutrality requires the inclusion of an ADC. In particular, Telstra argues that if an ADC is not included on ULLS prices, the resulting loss of the contributions previously being made by that line to any AD would need to be spread across all of Telstra's remaining lines. Telstra argue that this is in clear violation of the need for competitive neutrality.

The ACCC considered the following CRAI statement in its Draft Decision:

> The ACCC additionally believes that the ADC encourages inefficient by-pass and hence detracts from the efficiency of investment. However, to the extent to which by-pass would strand Telstra's assets, Telstra itself has an incentive to deter it… Telstra could and likely would do so by reducing [prices] where the alternative was the stranding of its assets.[130]

The ACCC considered that CRAI had in effect argued that Telstra, through the failure to impose an explicit ADC on the price it faces, can pursue pricing strategies not available to access seekers. In this scenario, it is clear that the access provider has an advantage over access seekers, regardless of whether it is earning excess profits or where it is able to spread any resulting loss across the rest of its network. Given the level of flexibility conferred upon Telstra by its failure to adopt an explicit transfer price mechanism, it is not clear that an ADC can be competitively neutral.

Ergas, as outlined above, has rejected the ACCC's interpretation of his CRAI statement. However, any acceptance of Ergas's clarification raises separate concerns with respect to competitive neutrality, as outlined below. Ergas states that anyone who can credibly threaten to bypass Telstra's network, or who does in fact bypass Telstra's network can escape an ADC and therefore any contribution to the funding of non-economic services. Ergas also states that competition would force Telstra's retail prices to decline, but also that Telstra would be forced to bear more of the burden of the access deficit.

Where an AD exists, it is not clear how these two statements can be reconciled, while ensuring that Telstra's legitimate business interests are met. However, where an AD

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[130] H. Ergas, *Expert Report on Access Deficit (Public Version)*, CRA International, May 2005, p. 11.

does not exist, Ergas appears to have confirmed the ACCC's conclusions with regard to an ADC, including why – given Telstra's ability to lower its retail prices through the lack of an internal transfer pricing mechanism – an ADC cannot be competitively neutral.

An ADC cannot ensure cost recovery nor competitive neutrality for Telstra where current and potential substitutes exist for its access services. However, an external funding scheme, such as the USF, is more likely to be competitively neutral. Any such scheme is more able to impose contributions for Telstra's non-economic services on a wider base in a more sustainable way going forward. All parties would be forced to contribute on an equitable basis to such a scheme where an AD was found to exist, in a transparent manner which would be more likely to promote competition.

Accordingly, the ACCC continues to believe that the inclusion of an ADC on the ULLS would not promote competition in the LTIE.

B.6.7. Direct costs of providing access

The ADC is not related to the direct costs of providing access to the ULLS. Rather, it is a notional charge related to the recovery of revenues above costs which Telstra claims it makes on ULLS lines which would otherwise be lost when the ULLS is taken. Clearly, an ADC is not a direct cost of providing access, and therefore the allowance of an ADC would appear to be inconsistent with this criterion. In particular, where no AD exists, the requirement to have regard to the direct costs of providing access would clearly act to preclude the inclusion of an ADC.

B.6.8. The interests of persons who have rights to use the declared service

The ACCC considers that the imposition of an ADC on ULLS prices would artificially inflate access prices to the declared service above TSLRIC+. For the reasons identified above in relation to other relevant criteria, the ACCC does not believe that an ADC would promote the interests of persons who have rights to use the declared service.

B.6.9. Any-to-any connectivity

The ADC does not have any relevance to this criterion.

B.6.10. Operational and technical requirements

The ADC does not have any relevance to this criterion.

B.7. The ACCC's view

The ACCC again reiterates that it is currently its position that there is in fact no AD, and therefore any imposition of an ADC on access services provided by Telstra must be inconsistent with the statutory criteria. However, the ACCC has also rejected an ADC as being inconsistent with the statutory criteria where an AD was found to exist. Accordingly, the existence of an AD is not central to its decision to reject.

The ACCC extensively examined the applicability of an ADC through a public inquiry process initiated by its February 2003 Discussion Paper titled *The Need for an ADC for PSTN Access Service Pricing*. The ACCC's final view on the issue, as set in the *Final Determinations for Model Price Terms and Conditions of the PSTN, ULLS and LCS Services*, was that there was no justification for an ADC. In the ACCC's view, there continues to be no basis for the reopening of this issue.

The LTIE is best promoted by reasonable prices which provide all telecommunications providers with efficient investment signals, while ensuring that competitive neutrality is maintained and Telstra's legitimate commercial interests are met. The ACCC therefore considers that an ADC is not consistent with the LTIE.

In this regard, where an AD is found to exist, the above analysis demonstrates that an ADC is only one of many mechanisms available for ensuring that the costs of providing non-economic services are met. The analysis demonstrates, with reference to the statutory criteria, why an ADC is inferior relative to other funding mechanisms available and/or already in place.

Subsidy schemes such as the USF are more capable of providing a solution which is sustainable in the longer-term, and display superior properties in terms of competitive neutrality, incentives for efficient investment and recovery of Telstra's costs. Given that this scheme is already in place it is incumbent upon Telstra to demonstrate that its subsidies are insufficient, rather than for the ACCC to intervene to over-rule the Government's decisions on the appropriate level of funding for non-economic services through its decisions on access prices. In any case, such matters should be examined separately to the current undertaking consideration.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

In summary, the ACCC considers that to the extent the price terms and conditions in the undertakings seek to impose an ADC, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, and investment in infrastructure
- will not ensure Telstra's legitimate business interests are met
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

The ACCC's view is to reject any ADC as being inconsistent with the statutory criteria. That is, the price terms and conditions, to the extent they seek to impose an ADC, are not be reasonable.

Appendix C. Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is the weighted average of the required rate of return on debt and equity. It is an important component in the calculation of annual capital costs which determine efficient ULLS and LSS network and specific costs.

In its draft determination, the ACCC stated that:

> As in its draft decision, the ACCC notes it has previously argued for WACC calculations and parameters similar to those set out in its 2000 assessment of Telstra's second PSTN undertaking, with a complete justification of those parameters is set out in the final decision on that undertaking.[131]

Having regard to arguments put it since then, the ACCC continues to believe that its previous position on the majority of WACC parameters remains appropriate, with two exceptions—the appropriate risk-free rate and debt-issuance costs.

The ACCC remains of the view that a WACC estimate that is higher than that based on input parameters the ACCC considers justified, is unreasonable. For an outline of the ACCC's methodology and appropriate input parameters in calculating the ULLS/LSS WACC refer to:

- ACCC's 2000 assessment of Telstra's second PSTN undertakings[132]
- ACCC's 2003 final determination on model price terms and conditions[133]
- ACCC's 2004 final decision on Telstra's core services undertakings.[134]

ACCC remains of the view that the recovery of network costs and ULLS and LSS specific costs should not be differentiated (i.e. the same cash flows should recover both network and service specific costs). As a result, calculating a ULLS and LSS service specific cost WACC is inappropriate. Instead, an ULLS/LSS WACC should be applied to both network and service specific costs. This is consistent with the ACCC's views on the method of recovery of ULLS and LSS specific costs.

In its draft decision, the ACCC noted the argument that it should recognise the possibility of erring in estimating a WACC and that it should estimate a range of possible WACCs and select a WACC one standard deviation from the mean when setting a reasonable WACC.

In addressing this argument, the ACCC constructed a Monte Carlo analysis of possible WACC estimates, based on possible ranges of parameters. These ranges were constructed However, the ACCC stated that:

> While the ACCC is not yet prepared to comment on the validity of this approach to *setting* the WACC, it may be useful in assessing the reasonableness of Telstra's proposed and ACCC's WACC estimates.[135]

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[131] ACCC, *A Report on the Assessment of Telstra's Undertaking for the Domestic PSTN Originating and Terminating Access Services*, July 2000.

[132] *Ibid*.

[133] ACCC, *Final Determinations for Model Price Terms and Conditions of the PSTN, ULLS and LCS Services*, October 2003.

[134] ACCC, *Assessment of Telstra's Undertakings for PSTN, ULLS and LCS – Final Decision*, December 2004.

It appears that Telstra have misunderstood ACCC's reasoning for undertaking a Monte Carlo analysis of possible WACC estimates. In his submission (on behalf of Telstra), Professor Robert G Bowman states:

> The use of Monte Carlo simulation analysis breaks new ground for the ACCC, and I applaud the effort. In the sections that follow I will comment on its Monte Carlo analysis, the specific WACC parameter estimates that it chooses, and the inferences that it draws from its analysis.[136]

Further, Bowman states:

> I have recommended that the ACCC set its regulatory WACC above its best estimate of WACC to balance the asymmetry in the social consequences of getting it wrong.
>
> To accomplish this regulatory balancing, the ACCC should apply a structured and rigorous approach based upon standard statistical techniques. The parameter estimates should be accompanied by estimates of the standard deviation of the estimate. This would then permit the ACCC to apply the level of confidence in its WACC decision that it felt was appropriate.
>
> I recommended the use of Monte Carlo simulation to assist the ACCC in compensating for the asymmetry of social consequences in setting WACC.[137]

The ACCC re-iterates that it has **not** used the Monte Carlo analysis as part of this assessment to set the regulatory WACC, or to compensate for any so-called asymmetry of social consequences.

As stated earlier, the ACCC continues to believe that its previous position on the WACC parameters remains appropriate, and a WACC estimate higher than that based on input parameters the ACCC considers justified, is unreasonable. Consequently, the ACCC's Monte Carlo analysis is not material in reaching the decision on the appropriateness of Telstra's ULLS and LSS monthly charge undertakings.

Unlike Bowman who attempts to set the WACC using a Monte Carlo analysis, the ACCC used the Monte Carlo method to analyse the likelihood its WACC estimate is not lower than the actual WACC, given different views on WACC parameters.

Bowman's analysis is based on personal views regarding appropriateness of particular parameter estimates:

> I have made my estimates using my expertise and best efforts.[138]

In contrast to this approach, the method employed by the ACCC in estimating a range of WACCs did not rely on its views on appropriate WACC parameters, but rather recognised that there is a range of opposing views and "best efforts". It derived a distribution of input parameters from a number of individual views and studies (including Professor Bowman's) where the basis for these views is appropriately justified.

The ACCC maintains that its "range of views" approach to Monte Carlo analysis is appropriate when used as a tool for "sanity checking" the likelihood of

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[135] ACCC, *Assessment of Telstra's ULLS and LSS Monthly Charge Undertakings – Draft Decision*, August 2005.

[136] R.G. Bowman, *Public Report on WACC in Response to ACCC Draft Decision on ULLS and LSS – Prepared for Telstra Corporation Limited*, September 2005, p. 3.

[137] *Ibid*.

[138] *Ibid*., p. 4.

appropriateness of various WACC estimates, and should be distinguished from Bowman's "statistical" approach to Monte Carlo simulation which is being used to derive a particular WACC estimate.

That said, as a separate exercise relating to its broader regulatory role, the ACCC is looking to further examine the broader question about the validity of a Monte Carlo analysis approach to actually setting the WACC. The ACCC believes that there are broad reaching implications, for numerous regulated industries, of any move to such an approach. A more thorough and detailed analysis, than that of devising a "sanity check" for a single undertaking in a single industry is required.

To that end, the ACCC is undertaking further exploratory work on the use of Monte Carlo analysis with regard to WACC estimation for regulated industries[139]. This work will be covering the appropriateness of various approaches to the analysis, including that proposed by Bowman, whose reports will be used as inputs.

[139] This work will relate to the ACCC's and the Australian Energy Regulator's (AER's) role in the regulation of communications, transport, energy and other industries.

Appendix D. IEN bypass charge

D.1. Introduction

The ACCC must not accept an access undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether particular terms and conditions are reasonable, the ACCC must have regard to the matters relevant under section 152AH. Notably, section 152AH(1) of the Act specially requires the ACCC to have regard to:

- whether the terms and conditions promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services (the long-term interests of end-users)
- the legitimate business interests of Telstra, and its investment in facilities used to supply the declared services
- the interests of all persons who have rights to use the declared services
- the direct costs of providing access to the declared services
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

This chapter contains the ACCC's assessment as to whether the price terms and conditions are reasonable to the extent they seek to require access seekers to pay an IEN bypass charge.

In considering the various criteria in s. 152AH, the ACCC will apply, where appropriate, the 'future with and without' test expressed in the Sydney Airports case.[140] This test requires the ACCC in considering particular terms and conditions to contrast the outcome under the section 152AH criteria in the event the undertaking was accepted against the outcome in the event the undertaking was rejected.. The ACCC does not consider that the 'future with or without' test will assist the ACCC in assessing all of the reasonableness criteria, and the ACCC will only apply the test to criteria where it facilitates the ACCC's analysis. In this case the ACCC has given consideration to the "future with and without test" with respect to matters relating to the LTIE (under section 152AH(1)(a)), the interests of persons who have rights to use the service concerned (under section 152AH(1)(c)), and the economically efficient operation of the service (under 152AH(1)(f)). Relevantly, in having regard to these matters the ACCC has considered whether acceptance of the undertaking (with its price terms and conditions) based on the relevant cost claims made out by Telstra) would better achieve those outcomes under section 152AH.

With respect to considering the outcome with respect to rejection of the undertaking the ACCC notes a number of alternative pricing outcomes might arise. All procedures and protections provided for in Part XIC in respect of declared services will be available to access seekers who wish to acquire the service. Access seekers may continue to seek to determine terms and conditions of access via commercial

[140] *Sydney Airports Corporation Ltd* (2000) 156 FLR 10

negotiation. Division 8 of Part XIC of the Act gives the Commission power to arbitrate access disputes. The ACCC has made its views on appropriate price terms and conditions clear to industry. The ACCC considers these views are likely to influence industry in respect to achieving commercial or regulatory outcomes. The Commission appreciates that given commercial imperatives for certainty and the costs involved with pursuing a regulatory outcome, an access seeker will in some instances negotiate an access price higher than it believed could be obtained using regulatory means.

In forming its views against these criteria the ACCC notes that its views were largely influenced by its consideration of the following:

- the promotion of competition
- achieving more efficient use of telecommunications infrastructure
- achieving more efficient investment in telecommunications infrastructure
- having regard to the legitimate commercial interest of access providers
- the interests of persons who have rights to use the declared service.
- the direct costs of providing access.

The following criteria were not considered significant to the ACCC's analysis:

- achieving any-to-any connectivity
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility.

Telstra claims that, because it is the carrier of last resort (COLR) and is obliged to provide a standard telephone service to all Australians should they request one, it must incur additional costs in IEN upkeep which ought to be funded by access seekers using the ULLS and LSS.

According to Telstra, the costs which it ought to recover are:

- A contribution to the common costs of the IEN
- The costs which are attributable to the particular customer.

The ACCC's findings are as follows:

- Given increasing returns to scale, Telstra will be able to recover the costs of its COLR obligations so long as it maintains a larger share of the IEN market than its nearest rival.
- It is *extremely* unlikely that Telstra's market share will fall below that of any competitor during the period of the undertaking.
- Even if Telstra's market share were to fall below that of another provider, it could still have ensured cost recovery by selling IEN access at a price equal to long run average cost.
- Given the ability of Telstra to ensure cost recovery, to impose an IEN bypass charge would unreasonably restrict the contestability of the IEN.

- The application of an IEN bypass charge will lead to retail prices which are higher than necessary for *all* consumers—both Telstra and access seekers customers.
- Telstra would continue to maintain its network in order to accommodate win back customers, regardless of the COLR obligations.
- To impose an IEN bypass charge is not necessary for Telstra's cost recovery and will reduce the level of competition in retail markets which rely on ULLS and LSS.

Based on these findings, and having regard to the statutory criteria, the ACCC considers that the terms and condition of the undertaking to the extent they impose an IEN bypass charge are not reasonable.

D.2. Telstra's argument

In supporting its argument Telstra relies on its own comments as well as a report prepared by Henry Ergas of CRAI.[141]

Telstra's argument can be restated quite simply in the form of an example involving only one exchange. Suppose that there are *N* customers at one exchange, initially served exclusively by Telstra. Suppose further that to serve these customers Telstra must incur a 'common' cost of *F* to set up the IEN and must also incur a cost, *A(x),* to serve the needs of the final group of *x* customers. Then, Telstra claims that if *x* customer were to move off Telstra's network, then it ought to be able to recover the amount:

$$F/N + A(x)/x$$

from each ULLS or LSS consumer. Telstra states that to do so is economically efficient because:

- it is not able to reduce the size of the network and must therefore continue to incur the cost *A(x),* even though *x* consumers have left
- the additional cost *A(x)* is *caused* by the ULLS and LSS customers and therefore ought to be recovered from them
- because the ULLS and LSS customers benefit from the ability to move back to Telstra at any time—a form of insurance according to Telstra—they ought to contribute to the common costs of providing the IEN service.

D.3. The ACCC's draft view

The ACCC's draft view was that the IEN bypass charge is not reasonable under the regulatory criteria. Significantly, the ACCC's draft view was that it is not consistent with the object of promoting competition in telecommunications markets in Australia.

D.4. Responses to the ACCC's draft view

With the exception of Telstra, respondents agreed with the ACCC's draft view on the IEN bypass charge.

Optus stated that:

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[141] H. Ergas, *Expert Report on ULLS and SSS prices—IEN Costs,* May 2005.

> Optus supports the ACCC's draft decision to reject Telstra's undertaking on the basis that… Telstra's inclusion of IEN and ADC cost components is inconsistent with the relevant statutory criteria.[142]

Macquarie Telecom stated that:

> Macquarie agrees that an IEN cost component in relation to ULLS or LSS is totally inconsistent with the statutory criteria, is contrary to the principle of competitive neutrality and would undermine economic efficiency.[143]

Telstra stated that:

> … Telstra believes that the Commission's rejection of Telstra's undertakings for ULLS and LSS monthly charges is not justified and that the Commission has erred in its application of the statutory criteria prescribed in Part XIC of the TPA. For all of the reasons set out in Telstra's submissions in support of the ULLS and LSS Monthly Charges, Telstra considers the charges in the undertakings are both appropriate and reasonable and should be accepted by the Commission.[144]

D.5. The ACCC's assessment of Telstra's IEN bypass charge

D.5.1. Cost recovery for Telstra

It is the ACCC's view that Telstra has the reasonable opportunity to recover the costs of meeting its COLR obligations without the need to impose an IEN bypass charge.

Common costs

The competitive process will not push prices down below the average cost of the marginal entrant.[145] Consequently, so long as access seekers face higher average costs than Telstra, it will always be able to recover the common costs associated with the IEN.

By definition, any alternative supplier of IEN services will need to incur the same amount of common costs as Telstra.[146] Consequently, so long as Telstra has a larger number of customers over which to spread its common costs it will have lower average common costs than its nearest competitor. Therefore, for Telstra to have average costs above those of other access seekers, it would have to have a smaller market share than the largest alternative provider of IEN services. The ACCC believes that this is highly unlikely to occur during the period of this undertaking.

In this situation, the effect of requiring access seekers to contribute to IEN common costs is to push up access seekers average costs so that they are significantly above Telstra's:

Telstra average costs:

$$(\textit{Line costs} \div \textit{total consumers}) + (\textit{IEN common costs} \div \textit{total consumers})$$

Access seeker average costs:

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[142] Optus, *Telstra's ULLS Monthly Charge Undertaking, 29 August 2005*, p. 1.

[143] Macquarie Telecom, *Response to Draft Decision on Telstra's ULLS and LSS Monthly Charges*, 12 September 2005, p. 1.

[144] Telstra, *Telstra's Submission in Response to the ACCC's "Assessment of Telstra's ULLS and LSS Monthly Charge Undertakings – Draft Decision" Dated August 2005*, 23 September 2005, ¶ 22.

[145] See discussion above.

[146] This is implied by the definition of forward looking efficient costs.

(Line costs ÷ total consumers)[147] *+ (IEN common costs ÷ total consumers) + (IEN common costs ÷ access seeker's customers)*

Consequently, access seekers will face costs far in excess of Telstra. Thus the IEN bypass charge will push up access seekers' average costs, push up retail prices and lead to Telstra earning a profit on each service it sells.

Telstra is likely to argue that it is inefficient for the IEN to be duplicated in this manner and that it is appropriate to charge an IEN bypass charge to reduce the likelihood of duplication. However, given the need to incur IEN common costs regardless of the amount of consumers using the service, IEN services display increasing returns to scale. Consequently, Telstra is always able to offer the services of its IEN at a price which will undercut access seekers while still breaking even. As a result, the most appropriate way to avoid inefficient bypass of the IEN is for Telstra to provide the services of its IEN in an efficient manner—priced at average cost.

Attributable costs

Telstra defines these costs as:

> Any additional IEN costs associated with IEN capacity which is reasonably necessary to accommodate demand that might be expected in the event of customers switching back to services using Telstra's IEN from ULLS [and LSS].[148]

The ACCC believes that in the absence of an IEN bypass charge, Telstra will still be able to recover these costs.

Firstly, in a normal competitive process, Telstra would maintain sufficient IEN capacity to take back those customers which it wins back from access seekers. Given the low incremental costs of supplying telephony services—i.e. because of increasing returns to scale—all returning customers are likely to be profitable for Telstra. Thus, in pursuit of profit maximisation, Telstra is likely to provision the IEN at a sufficient size to serve all returning COLR customers, regardless of whether it has the obligation to supply them. This is especially true if, as Telstra claims, access seekers will engage in 'cherry picking'—taking the most profitable customers.

It is worth noting that access seekers using ULLS and LSS will also provision for those extra customers which it hopes to win from Telstra. Consequently, were the ACCC to allow an IEN bypass charge for attributable costs, Telstra and access seeker net costs would compare as follows:

Telstra costs:

Average line costs + average cost of IEN for existing customers

Access seeker costs:

Line costs + average cost of IEN for existing customers + cost of provisioning for new access seeker customers + cost of provisioning for returning Telstra customers (IEN bypass charge)

Consequently, the effect of allowing the attributable cost portion of the IEN bypass charge is to increase access seeker average costs to the point where they are well

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[147] Through ULLS network costs charge.

[148] Telstra, *Telstra's Submission in Support of the ULLS Monthly Charges Undertaking Dated 13 December 2004*, p. 24.

above Telstra's. The overall effect will be to raise the retail price—because prices will be set at access seeker average costs in the long run—and to provide a per unit profit for Telstra of the difference between Telstra and access seeker average costs.

Secondly, the ACCC believes that, because of increasing returns to scale and the larger scale at which Telstra operates, there will be no time during the course of the current undertaking where Telstra's combined attributable and common costs of IEN provision leads to them facing an average cost per service that is above access seekers average costs.

Thirdly, Telstra has been aware of its COLR obligations for some time. Were it interested in avoiding the possibility of bypass and efficiently using the extra IEN capacity required to meet the COLR obligations, it was open to Telstra to sell access to the IEN at a price which would have ensured that access seekers did not bypass Telstra's IEN. Further, given the ubiquitous increasing returns to scale in this technology, it would always have been possible for Telstra to sell access to the IEN at a profit while ensuring that access seekers had no incentive to bypass the IEN. If Telstra did not take up this option, but rather chose to sell IEN access above cost, then the possibility that it will now lose money must have been assumed in its business strategy and end users ought not to bear the cost of Telstra's decision. To allow the IEN bypass charge would effectively legitimise any decision made by Telstra to sell IEN access at an inflated price and would reduce the contestability of the IEN by penalising those parties which chose to build new IEN services to challenge Telstra's inefficient pricing.

Finally, even if Telstra were to be in a situation where the attributable costs of the COLR lead to it having costs which are above access seekers, Telstra's method of cost recovery is not correct. Telstra proposes that *all* attributable costs be recovered from ULLS and LSS users. This, however, is not possible. Suppose that all the costs are passed on to access seekers, then the relative average costs are:

Telstra average costs:

> *Average line costs + average IEN costs of current users*

Access seeker costs

> *Average line costs + average IEN costs of current users + (attributable COLR costs ÷ no. access seeker customers)*

This will lead to a situation where access seeker costs are above Telstra's. In the long run, prices will converge to be equal to access seeker average costs. Thus Telstra will recover all of the attributable COLR costs from access seeker charges and in addition will earn a profit, equal to the attributable COLR costs divided by the number of access seeker customers, from each of its own customers. This will be a super normal profit for Telstra.

The only way to ensure that Telstra's costs are met and that Telstra's does not earn a super normal profit, is to spread the attributable COLR costs over all consumers using the IEN. In that case, average costs will be:

Telstra average costs:

> *Average line costs + average IEN costs of current users + (attributable COLR costs ÷ no. IEN users)*

Access seeker costs

Average line costs + average IEN costs of current users + (attributable COLR costs ÷ no. IEN users)

This will ensure that both access seekers and Telstra face the same costs and that retail prices are at the lowest level which will cover Telstra's costs. As the attributable COLR costs are likely to be low—given the low incremental costs of providing IEN services—and that the total number of IEN users is very high, this contribution to attributable COLR costs is likely to be very small in practice, and will almost certainly be outweighed by Telstra's cost advantage stemming from its greater market size.

D.5.2. Cost causation

The ACCC does not agree with Telstra that the COLR costs are caused by the end users which decide to make use of the IEN. The COLR system provides insurance to *all* Australians, giving them the surety that they will have access to a standard telephone service. This goes for both Telstra and access seeker customers. Thus, as with the specific costs, the COLR costs ensure that Australians are able to move between Telstra and access seekers while being guaranteed of a standard telephone service. The COLR obligation makes this option more viable and leads to lower prices for all Australians. Further, Telstra customers directly benefit from the fact that they know Telstra will not cancel their connection if they are not a profitable customer, nor will Telstra use their connection to attempt to win back more profitable access seeker customers. Consequently, all Australian's benefit from the insurance provided by the COLR obligations and should therefore all have to pay for this obligation.

Having said this, the ACCC reiterates the point made above that, Telstra has always had a reasonable opportunity to recover the COLR IEN costs by selling access to the IEN at reasonable prices.

D.5.3. Conclusions

With respect to Telstra's arguments, the ACCC concludes that:

- Telstra will always be able to recover the costs of any COLR obligations without an IEN bypass charge.
- If Telstra is unable to recover the costs because it engaged in a business strategy aimed to reduce the contestability of the IEN and it ought to bear the consequences of that strategy.
- To the extent that there are costs associated with the COLR obligations, they ought properly to be met by all Australians who benefit from the insurance provided.
- Sharing the costs in this way is the only method which will ensure that Telstra does not earn super normal profits. It will also lead to lower retail prices.

D.6. Assessment against the regulatory criteria

The ACCC has conducted its assessment under the statutory criteria set out in section 152 AH of the Act. In forming its views against these criteria the ACCC notes that its views were largely influenced by its consideration of the following:

- the promotion of competition

- achieving more efficient use of telecommunications infrastructure
- achieving more efficient investment in telecommunications infrastructure
- having regard to the legitimate commercial interest of access providers
- the interests of persons who have rights to use the declared service.
- the direct costs of providing access.

The following criteria were not considered significant to the ACCC's analysis:

- achieving any-to-any connectivity
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility.

D.6.1. Promotion of competition

It is possible to view increased or decreased competition in several markets as a result of the ULLS and the imposition of the IEN bypass charge. These are:

- the market for retail telephony services
- the market for last mile technologies
- the market for IEN services.

The market for telephony services is the most directly affected and will be addressed in most depth. Other markets will be analysed where they are relevant.

The ACCC recognises that competition is a process of rivalry and that the degree to which it is promoted by a particular pricing principle is difficult to observe. Consequently, in assessing the impact on competition, the ACCC tends to have regard to the *outcome* of competition from the consumers perspective.[149] That is, the ACCC will assess the prices and qualities likely to prevail in the market under different pricing principles. The pricing system likely to lead to an outcome most closely approximating a perfectly competitive[150] market will be deemed to promote competition to the greatest extent.[151] The overall aim is not to have prices as low as possible, but rather to produce the lowest prices which are consistent with recovery of efficient costs.

In assessing the prices which are likely to prevail in the retail market it is necessary to assume some kind of equilibrium concept. As increasing returns to scale are likely to characterise the production process, the market should be considered to be 'monopolistically competitive'. Consequently, it is appropriate to assume that long run prices will be set so that the marginal entrant is just able to break even.[152] This has three implications. First, if Telstra's average costs are below those of access seekers,

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[149] See for example, ACCC, *Declaration of Local Telecommunications Services*, July 1999, p. 74.

[150] Or potentially perfectly contestable.

[151] This paper uses a test more closely related to perfect contestability. That is prices should be as close to average cost as possible, but no less than average cost.

[152] See, for example, A. Dixit and J. Stiglitz (1977), 'Monopolistic Competition and Optimum Product Diversity,' *American Economic Review*, 67(3), pp. 297 – 308 at p. 300.

it will earn super normal profits. Second, market prices will be at the lowest point commensurate with cost recovery where Telstra's and access seeker's average costs are equal.[153] Third, it is only where Telstra has average costs which are above those of access seekers that it may not recover all of its efficient costs.

Common costs

The starting point for Telstra's analysis is the contention that

> [w]hen access seekers purchase Telstra' ULLS or SSS they … generally invest in their own switches and other IEN (or equivalent) infrastructure.[154]

Consequently ULLS access seekers will not be using Telstra's IEN at all.

It is not clear whether this is a reasonable assumption. AAPT states:

> The IEN is one option the access seeker can consider, as is building their own transmission infrastructure. There are significant efficiencies in transmission provision, so the "buy" option of using the Telstra IEN should be more attractive that the build option if Telstra correctly prices it.

Nevertheless, it is reasonable to consider the appropriateness of the IEN bypass charge if Telstra's contention is accepted.

By definition, the common costs of the IEN are those costs which Telstra or an access seeker must incur before they are able to provide any IEN services. The relevant costs are the forward looking, efficient costs of producing an IEN service judged to be the TSLRIC of providing the IEN. Consequently, both Telstra and any alternate IEN provider will face the same IEN common costs. Therefore, their relative average costs of IEN supply will be:

Telstra's average costs of IEN supply:

Total IEN common costs ÷ total number of Telstra's customers

Alternative IEN provider's average costs of IEN supply:

Total IEN common costs ÷ total number of alternative provider's customers

Therefore, so long as Telstra has a larger customer base than the largest alterative provider, it will have lower average costs of supply. As a result Telstra will always be able to recover its common costs of the IEN, because retail prices will be set above its average costs. The ACCC believes that it is extremely unlikely that an alternative provider will gain a market share larger than Telstra during the course of this Undertaking.

Were the ACCC to allow an IEN bypass charge in this situation then the relative costs of Telstra and access seekers would be:[155]

Telstra's average costs:

Average line cost + (total IEN common costs ÷ total number of CAN consumers)

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[153] It is assumed throughout this discussion that all access seekers have the same level of costs.

[154] H. Ergas, *Confidential Expert Report on ULLS and SSS prices – IEN Costs*, May 2005, p. 2.

[155] This assumes that an alternative IEN provider sells IEN services at average cost – commensurate with a monopolistically competitive upstream market.

Alternative IEN provider's average costs of IEN supply:

> *Average line cost + (total IEN common costs ÷ total number of CAN consumers) + (total IEN common costs ÷ total number of alternative provider's customers)*

The effect is to increase the average costs of access seeker which will lead to a higher price in the retail market. Consequently, the effect of including an IEN bypass charge to recover the common costs of the IEN is to increase retail prices above the level required to ensure cost recovery. This is clearly inconsistent with the aim of promoting competition.

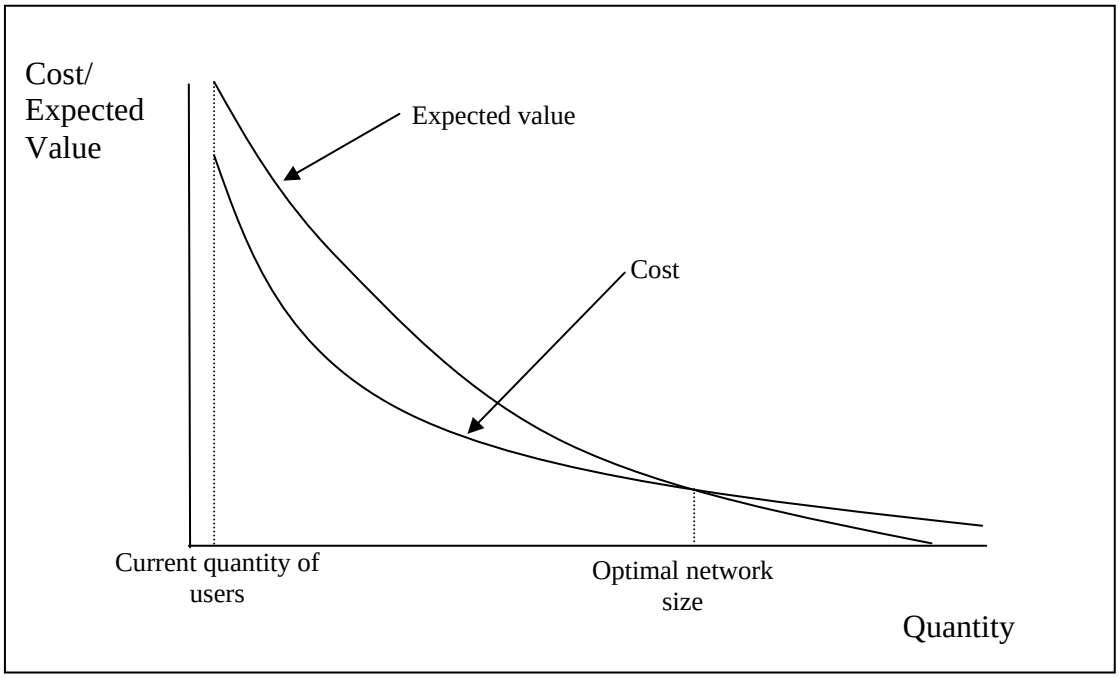
Attributable costs

As noted above, these are the costs of maintaining the IEN at the capacity necessary for Telstra to service an increased demand from customers switching back to Telstra, exercising their COLR right. The most favourable interpretation of this argument is that Telstra will have to maintain a network which will satisfy the demand of *all* Australian consumers should they return to Telstra. Therefore, Telstra is effectively arguing that, if alternative IEN services are built, then the incremental cost associated with serving each customer using the alternative IEN will have to be met by *both* Telstra and the alternative IEN provider. Again, competition will be best served when prices are set at the lowest point commensurate with cost recovery. That is, where both access seekers and Telstra have the same average costs.

First, in the course of normal competition, Telstra would maintain the IEN at a size which would allow it to accommodate return customers. Access seekers would also engage in a similar strategy. In determining the extra size, Telstra would assess the relative costs and benefits of maintaining the capacity. This would lead to a rule where Telstra would maintain the IEN at the point where the expected value of returning customers is equal to the cost of maintaining the extra capacity. Figure D.6.1 provides an example of this calculation. Because of increasing returns to scale, the cost of supplying more services is decreasing. The expected value of providing those services is also decreasing because, while the value is likely to be high and relatively constant,[156] the chance that the consumers will return to Telstra is decreasing in the number of consumers.

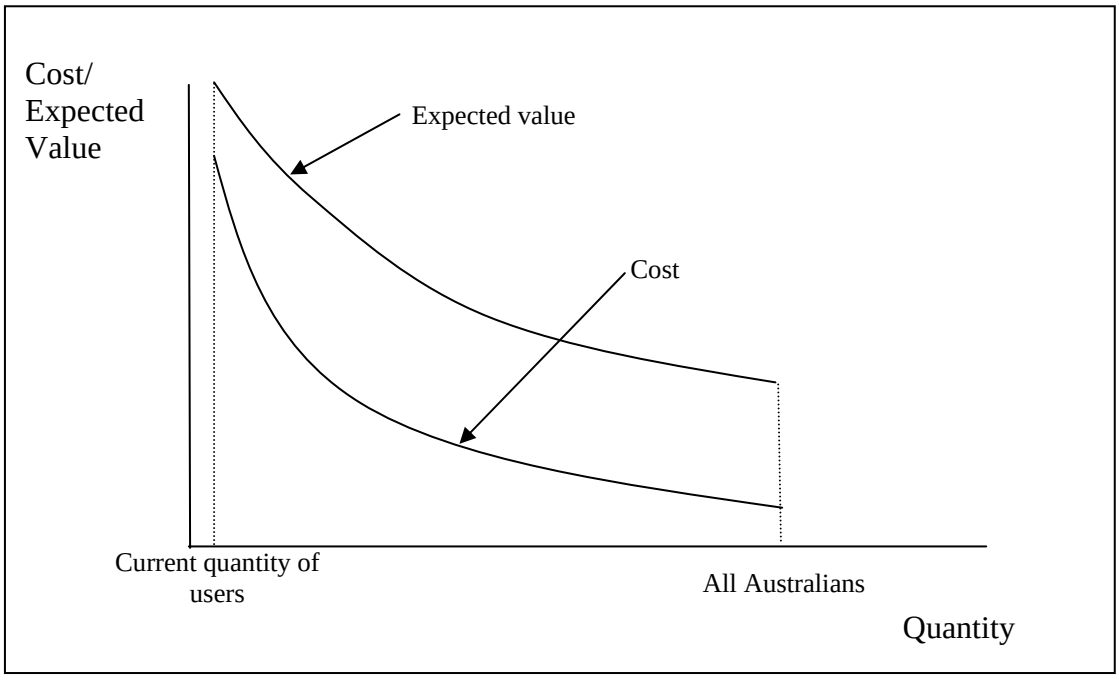
[156] Because, as Telstra states, return ULLS and LSS customers are likely to be high value customers.

Figure D.6.1. Telstra's cost benefit analysis



The point at which expected value is equal to cost is the optimal size for Telstra to build its network if its aim is profit maximising. It is worth noting that it is by no means clear that there is an optimal size. Figure D.6.2 shows an alternative situation where, at the point where Telstra's network is capable of providing for all consumers, the expected value is still greater than the cost. In this case, Telstra will maintain the network at a size necessary to meet the COLR obligations regardless.

Figure D.6.2. Alternative version of Telstra's cost benefit analysis



A key question, therefore, is which of these situations in most likely. Telstra has consistently argued that the customers making the move to ULLS are likely to be 'high value users' which access seekers 'cherry pick'. In this situation, the benefits to Telstra of convincing these customers to return are likely to be very high, while the

costs are likely to be low because of increasing returns to scale. Consequently, the ACCC believes that it is highly likely that Telstra would maintain its network at a size necessary to meet the COLR obligations even in the absence of those obligations.

Because access seekers must also provision for new customers, the effect of the bypass charge would be to force a wedge between access seeker and Telstra costs:

Telstra average costs:

> *Average line costs + average IEN costs of current customers*

Access seeker average costs:

> *Average line costs + average IEN costs of current customers + costs of provisioning for new customers + Telstra's costs of provisioning for new customers*

Overall, this cannot be consistent with promoting competition as it will lead to an increase in retail prices which are not justified by Telstra's need for cost recovery.

Even if the situation is as depicted in Figure D.6.1, the effect of the COLR obligation is to increase the expected value of maintaining a larger network—because it reduces risk of fines for Telstra—thus moving from the situation depicted in Figure D.6.1 toward that depicted in Figure D.6.2. The ACCC doubts that this will lead to a large increase in costs. Further, Telstra has calculated its IEN bypass charge on the basis of *all* costs associated with the move from its current quantity of consumers to meeting its COLR obligations, rather than from its optimal network size, to the point of meeting its COLR obligations. Therefore, Telstra's calculations are palpably inappropriate and will have the effect of transferring the costs of Telstra's competitive strategy on to access seekers. It is the ACCC's view that any slight cost increase in this case for Telstra would be more than offset by its lower average common costs of IEN provision which result from its large market share.

Further, even if the situation is as in Figure D.6.1 and the COLR obligations lead Telstra to maintain a larger than necessary network, then competition is best promoted when all consumers share the costs of this extra capacity. Under Telstra's claim that costs be allocated solely to access seekers relative average costs are:

Telstra's average costs:

> *Average line costs + average costs of IEN services for all CAN users*[157]

Access seeker's average costs:

> *Average line costs + average costs of IEN services for all CAN users + (costs of meeting COLR obligation ÷ number of access seeker customers)*

Alternatively relative costs where the COLR costs are spread over all CAN users are:

Telstra's average costs:

> *Average line costs + average costs of IEN services for all CAN users + (costs of meeting COLR obligation ÷ all CAN users)*

Access seeker's average costs:

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[157] All CAN users includes the users of the ULLS.

Average line costs + average costs of IEN services for all CAN users + (costs of meeting COLR obligation ÷ all CAN users)

The second formulation leads to lower average costs for access seekers and will lead to a lower retail price while still ensuring cost recovery for Telstra. Thus it is to be preferred from the perspective of promoting competition.

The ACCC believes that if steps were taken by Telstra to calculate the cost appropriately (that is, it only accounted for the costs of moving from the optimal network size to the COLR network size and spread COLR costs over all consumers), then the attributable IEN charge would be *extremely* small.

Consequently, in the absence of information from Telstra providing reasons why it needs to maintain the network at greater than the optimal size and calculations of the appropriate IEN bypass charge using the ACCCs method, the ACCC is not able to accept that an IEN bypass charge is appropriate under this regulatory criteria.

Finally, Telstra claims that the carrier of last resort (COLR) obligations force it to maintain its IEN at a sufficient scale to provide services to all Australians; regardless of how many customers are actually connected to its network. Telstra's claim, if true, would ensure that the IEN is a natural monopoly, where it would be preferable that only Telstra provide IEN services. Telstra disputes this claim, but it seems to be axiomatic.[158] Regardless of the shape of Telstra's cost functions, if Telstra has to maintain the IEN at a point sufficient to supply all consumers, then any further investment in IEN services will raise the total cost of supply without increasing the effective capacity.[159] Consequently, the effect of the COLR, as interpreted by Telstra, is to make the IEN a natural monopoly.

Because the IEN is a natural monopoly, the role of competition is to push down the price at which the natural monopolist provides the service. Thus, the threat of supply leads the monopolist to lower its prices because it realises that it may face a loss. This is the main result of the literature on contestability and it does not rely on actual entry.[160]

Telstra ought to have been aware for some time that its COLR obligations meant that it was a natural monopolist and that, if it did not sell prices for IEN access at a point that would undercut the costs of competitive supply, it might be unable to recover its costs. In this situation, Telstra could avoid the loss by selling access to the IEN at such a price that no entrant would decide to bypass Telstra's network. Thus, the threat of IEN bypass would lead Telstra to lower its IEN prices and lead to a competitive outcome in the IEN market. If Telstra had behaved in this manner, all

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[158] Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Discussion Paper in Respect of ULLS Received March 2005*, 27 May 2005, p. 27.

[159] W. Baumol (1977), 'On the proper Tests for Natural Monopoly in a Multiproduct Industry,' *American Economic Review*, 67(5), pp. 809-822.

[160] See, W. Baumol, E. Bailey and R. Willig (1977), 'Weak Invisible Hand Theorems on the Sustainability of Multiproduct Natural Monopoly' *American Economic Review*, 67(3), pp. 350-365.

consumers would continue to use its IEN and there would be no cost associated with the COLR obligations, except Telstra's foregone monopoly profits.[161]

Consequently, the only situation in which access seekers would bypass the IEN is where Telstra is charging too high a price. In this situation, the effect of the IEN bypass charge is to increase the cost of entry for potential IEN providers. That is, if a firm were to bypass Telstra by building its own IEN, it would still have to pay for Telstra's services. The overall effect of this would be to reduce the contestability of the IEN market. Consequently, such a charge cannot be consistent with the goal of promoting competition.

D.6.2. Any to any connectivity

The IEN bypass charge does not seem to have any relevance to this criterion.

D.6.3. Economically efficient use of, and economically efficient investment in, the infrastructure by which listed services are supplied

Telstra's legitimate commercial interests

As shown above, there are a limited set of situations in which Telstra's average costs will be above those of its competitors. In this case, Telstra would argue that it may make a loss and that this is against its legitimate commercial interest. However, these interests of Telstra should not be considered legitimate. It is not legitimate for Telstra to have charged unreasonably high prices for access to the IEN and consequently to have incurred a loss. If this has occurred, Telstra must bear the costs of its illegitimate business strategy.

Investment in infrastructure

The IEN bypass charge is not reasonable under this regulatory criterion as it distorts the incentives associated with:

- the build buy decision in relation to the CAN
- the build buy decision in relation to IEN.

The effect of the IEN bypass charge is to increase the costs of the CAN due to a charge which is not related to the CAN. This will tend to increase the probability that competitors will bypass the CAN when it is not efficient to do so. Telstra has argued the opposite of this, suggesting that in the absence of the IEN bypass charge access seekers will make use of the ULLS when the social costs associated with the ULLS costs are not met. However, as discussed above, the only reason for these social costs to be higher than necessary is if Telstra has charged unreasonably high prices for access to the IEN.

As discussed above, the effect of the IEN bypass charge would be to reduce the contestability of the IEN market. Consequently it is likely to lead to inefficient decisions in relation to IEN build.

Telstra's legitimate business interests

In most cases, the IEN bypass charge will lead to Telstra earning super normal profits. This goes beyond its legitimate business interests. However, in some cases it may

[161] The explanatory memorandum associated with part XIC specifically states that these foregone profits should not be considered part of the costs of supply.

make a loss where it has inefficiently encouraged the build of alternative IEN capacity. As argued above, the costs incurred by Telstra because of this should not be considered legitimate.

Interests of those who have a right to use the declared service

The IEN bypass charge is in conflict with the rights of access seekers from two perspectives.

First, access seekers have a right to build alternative IEN infrastructure in cases where they can provide access at costs below current market prices. Telstra's argument amounts to saying that, if access seekers assert this right, Telstra will continue to recover the costs of its IEN through the charges for ULLS –Telstra's enduring source of market power. This is clearly in breach of access seekers rights.

Second, the effect of the IEN bypass charge is to further increase access seekers average price in relation to Telstra's. This raises the significant risk that Telstra will attempt to force them out of the market in the long run. This is in breach of the access seekers right to do business in a market which is no more risky than necessary.

D.6.4. The direct costs of providing the service

As discussed above Telstra will always have the reasonable opportunity to recover the direct costs of supplying the IEN services, including meeting the COLR obligations.

D.6.5. Operational and technical requirements

The ACCC considers that operational and technical requirements are not an issue in this discussion of Telstra's proposed IEN charge.

D.6.6. Economic efficiency

Allocative and productive

Allocative efficiency is achieved where prices reflect the costs of providing a service. Telstra argues that the COLR obligations provide insurance to those consumers who take up a ULLS or LSS service and that economic efficiency indicates that they should pay the costs of the service. The ACCC does not agree with this contention.

The ACCC believes that allocative efficiency is best achieved where Telstra prices IEN access at a price equal to average cost. If Telstra takes this option there should be no IEN bypass and consequently no IEN bypass costs. If Telstra has not chosen to take up this option, it will not improve allocative efficiency to have an IEN bypass charge. To allow the IEN bypass charge will, as shown above, lead to prices for all consumers that are above cost. That is, it is not possible to levy the IEN bypass charge only on ULLS and LSS customers because it will lead to a general price increase.

Dynamic

Dynamic efficiency is achieved when industries make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

The ACCC believes that imposition of an IEN bypass charge will result in dynamic inefficiencies. This is because both Telstra and access seekers would have incentives to delay efficient investment in new IEN technologies. Telstra will be earning super normal profits as a result of the IEN bypass charge, and will therefore invest in new IEN technologies only when the cost reduction is great enough to outweigh the super

normal profit, which is likely to occur much later than when new IEN technologies become economically viable.

Access seekers will also delay efficient investment in the IEN. This is because they will be at a competitive disadvantage to Telstra as a result of the IEN bypass charge (see above) if they choose to supply services such as basic telephony via ULLS rather than via PSTN O/T. The investment will be delayed until the savings outweigh the competitive disadvantage. Based on Telstra's proposed calculation of the IEN bypass charge, efficient IEN investment by access seekers may actually never occur.

D.7. ACCC's view

The ACCC's view, based on its reasons as set out above, is to reject an IEN bypass charge as being inconsistent with the statutory criteria. The ACCC considers that the above discussion made for the purposes of the ACCC's Draft Decision clearly outlines the appropriate application of the relevant criteria to this issue.

The ACCC believes that acceptance of the Undertaking would, as compared to the situation likely to occur if it were rejected, be less likely to promote the LTIE. Moreover, in respect to the price terms and conditions that seek to impose an IEN bypass charge, in the event of rejection of the undertaking the ACCC considers access seekers will be more likely to reach agreement on terms and conditions of access that better promote the LTIE, and are more consistent with the interests of users and economic efficiency, than provided for under the undertaking.

The ACCC notes that Telstra has not provided any compelling arguments in response to the ACCC's draft view. The ACCC notes that in its submission Telstra has simply reiterated its previously expressed position.

In summary, the ACCC considers that to the extent the price terms and conditions in the undertakings seek to impose an IEN bypass charge, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access
- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

Accordingly the ACCC's view is that the price terms and conditions are not reasonable to the extent they seek to impose an IEN bypass charge.

Appendix E. Network Costs

E.1. Introduction

The ACCC must not accept an access undertaking unless it is satisfied that the terms and conditions are reasonable. In forming a view about whether particular terms and conditions are reasonable, the ACCC must have regard to the matters relevant under section 152AH. Notably, section 152AH(1) of the Act specially requires the ACCC to have regard to:

- whether the terms and conditions promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services (the long-term interests of end-users)
- the legitimate business interests of Telstra, and its investment in facilities used to supply the declared services
- the interests of all persons who have rights to use the declared services
- the direct costs of providing access to the declared services
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or facility
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

This chapter contains the ACCC's assessment as to whether the price terms and conditions are reasonable to the extent they impose a price based on the newtwork coststs claimed by Telstra.

In considering the various criteria in s. 152AH, the ACCC will apply, where appropriate, the 'future with and without' test expressed in the Sydney Airports case.[162] This test requires the ACCC in considering particular terms and conditions to contrast the outcome under the section 152AH criteria in the event the undertaking was accepted against the outcome in the event the undertaking was rejected.. The ACCC does not consider that the 'future with or without' test will assist the ACCC in assessing all of the reasonableness criteria, and the ACCC will only apply the test to criteria where it facilitates the ACCC's analysis. In this case the ACCC has given consideration to the "future with and without test" with respect to matters relating to the LTIE (under section 152AH(1)(a)), the interests of persons who have rights to use the service concerned (under section 152AH(1)(c)), and the economically efficient operation of the service (under 152AH(1)(f)). Relevantly, in having regard to these matters the ACCC has considered whether acceptance of the undertaking (with its price terms and conditions) based on the relevant cost claims made out by Telstra) would better achieve those outcomes under section 152AH.

With respect to considering the outcome with rejection of the undertaking the ACCC notes that a number of alternative pricing outcomes might arise. All procedures and protections provided for in Part XIC in respect of declared services will be available to access seekers who wish to acquire the service. Access seekers may continue to seek to determine terms and conditions of access via commercial negotiation.

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[162] *Sydney Airports Corporation Ltd* (2000) 156 FLR 10

Division 8 of Part XIC of the Act gives the Commission power to arbitrate access disputes. The ACCC has made its views on appropriate price terms and conditions clear to industry. The ACCC considers these views are likely to influence industry in respect to achieving commercial or regulatory outcomes. The Commission appreciates that given commercial imperatives for certainty and the costs involved with pursuing a regulatory outcome, an access seeker will in some instances negotiate an access price higher than it believed could be obtained using regulatory means.Telstra has estimated the efficient network and associated costs for 2004-05 using its PIE II model. This model has been used by Telstra for network cost estimations in support of several recent Undertakings.

The ACCC has previously reviewed the appropriateness of the PIE II model and its results in accordance with the statutory criteria, as well as the appropriateness of numerous key assumptions underlying the model generating its results.[163]

The ACCC considers that in general, prices which reflect the costs of providing the service are most likely to achieve access prices consistent with all of the statutory criteria. It is therefore the ACCC's view that for the majority of services, including the ULLS, access prices should be based on the TSLRIC of providing the service, plus a contribution to common costs. Any access price for the ULLS consistent with TSLRIC+ is therefore likely to be consistent with the statutory criteria.

As a result, the ACCC considers that any assessment of Telstra's submission with respect to the costs of the underlying network assets used in the provision of the service, is therefore a consideration as to whether or not Telstra's claimed costs represent a reasonable estimate of TSLRIC+. Any network cost claim which is not a reasonable estimate of TSLRIC+ cannot achieve outcomes consistent with the statutory criteria. Conversely, any network cost claim which is a reasonable estimate of TSLRIC+ will be consistent with the statutory criteria.

E.2. The ACCC's draft view

The ACCC's draft view was to reject Telstra's claimed network costs for the ULLS. The ACCC believed that the PIE II model and its underlying assumptions are unlikely to produce estimates for the basis of establishing price terms and conditions which can be considered reasonable under the statutory criteria. Accordingly, the ACCC cannot accept estimates produced by an unadjusted PIE II model as reasonable.

E.2.1. Appropriateness of modelling assumptions

Telstra has made no adjustments to the modelling assumptions underlying the PIE II model in its estimation of the efficient network and associated costs for 2004-05.[164] Telstra's submission notes that the PIE II model and its modelling assumptions have previously been provided to and scrutinised by the ACCC and industry participants,[165] but is generally silent on the implications of this scrutiny or any changes it could have made as a result.

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[163] See, ACCC, *Assessment of Telstra's Undertakings for PSTN, ULLS and LCS*, December 2004, Appendix C.

[164] Telstra extrapolates the estimates for 2005-06 from the estimates for 2003-04 and 2004-05.

[165] Telstra, *Public Version of Telstra's Submission in Support of the ULLS Monthly Charges Undertaking dated 13 December 2004*, pp. 6-7.

Given the concerns identified in relation to the transparency and manipulability of the model, the ACCC continues to believe that an appropriate level of scrutiny has not in fact taken place. Further, the ACCC notes that significant concerns have been identified even under this extremely limited scrutiny, and Telstra appears to have made no adjustments to the model in response to the identified concerns of the ACCC and industry participants. Further, Telstra's response suggests it is not willing to agree to any changes to its model under any circumstances.

Telstra's supporting submission to the ULLS undertaking contains a response to some of the ACCC's criticisms in Annexure B. More recently, Telstra has commissioned CRAI to provide it with further argument supporting the modelling assumptions of PIE II. This material was assessed for the purposes of the ACCC's Draft Decision.

E.2.2. Network provisioning

The ACCC has previously stated that it does not agree that there is necessarily increasing demand for fixed line services. The ACCC further noted that the issue is complicated and requires further analysis and justification.

Telstra's and CRAI's arguments in favour of continuing Telstra's past provisioning practices have largely failed in this regard. While Telstra's response highlights that Telstra may face a range of possible demand scenarios, without evidence or justification it asserts that it is most appropriate to adopt the approach to provisioning that Telstra would prefer. The ACCC has previously expressed that it does not agree with Telstra's current approach. In particular, the ACCC believes that costs of provisioning for future demand should be recovered from that demand once it eventuates. This will ensure costs are recovered from the appropriate customer base, rather than perpetually over-recovered, as re-setting TSLRIC prices means that demand never catches up with provisioning. The ACCC sees no reason to change this position given Telstra's inability to justify its position with supporting evidence.

E.2.3. Operation and maintenance factors

The ACCC remains concerned about the manner in which operation and maintenance cost percentages are calculated within the model. The ACCC believes that Telstra needs to provide further justification as to the manner in which all the proposed cost percentages are determined. Telstra continues to rely on its original explanation of its methodology in relation to these factors.[166] The ACCC considers that Telstra's explanation of its approach, as well as the actual calculations involved, is insufficient for it to be satisfied that the claimed percentages are appropriate.

Telstra states that it constructs indirect O&M cost percentages and indirect capital cost percentages through the division of accounting measures of indirect costs by accounting measures of direct costs. The ACCC understands that these percentages are then applied to the relevant asset class in the PIE II model to arrive at estimates for these costs.

Telstra asserts that it is unnecessary to adjust accounting information to account for efficiency as previously proposed by the ACCC. The ACCC also notes that the extent to which Telstra was currently adjusting appropriately for efficiency was unclear.

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[166] See: Telstra, *Telstra's Submission in Relation to the Methodology used for Deriving Prices Proposed in its Undertakings dated 9 January 2003*, 9 January 2003, Annexures H & I.

Telstra's use of actual costs when calculating both its direct and indirect O&M percentages remains a concern to the ACCC. Specifically, Telstra appears to make no adjustments for the efficiency of these costs. Further, with no justification, when calculating the percentages, Telstra for some percentages uses historical asset costs,[167] and for other percentages employs PIE II estimated costs. This dichotomy is not justified by Telstra, and creates additional uncertainty over the accuracy of calculations.

The failure to account for efficiency appears to be particularly important in several respects. Given that PIE II is intended to calculate efficient costs, Telstra's use of actual costs without evidence that these are in fact efficient appears unreasonable.

Telstra's use of actual costs also appears to conflict with the other assumptions underlying the PIE II model. Namely, if the network is to be constructed with predominantly new assets, and costed on this basis, it is unlikely that actual costs currently being incurred to operate and maintain the network would reflect those costs needing to be incurred to operate a new network in its initial years of operation. Telstra's O&M calculations appear to have not addressed such considerations.

Finally, Telstra's claims that accounting for efficiency in indirect O&M costs is irrelevant (should adjustments be proportional) in determining the percentages, efficiency adjustments clearly have significant implications for the overall amount of O&M costs the PIE II model will estimate. Specifically, where direct O&M costs are inefficient, an efficiency adjustment will reduce the direct O&M percentages, and thus the resulting amounts in the PIE II model. As indirect cost percentages are related to direct O&M percentages, an efficiency adjustment, while not altering the indirect O&M percentage, will in fact reduce the amounts calculated in the PIE II model for indirect O&M costs.[168]

The ACCC believes that there is a significant onus on Telstra to verify that its claimed O&M percentages result in the estimation of O&M costs which could reasonably be expected to be incurred by an efficient operator. At this stage, Telstra has failed to do this, and accordingly the ACCC cannot be satisfied that the price terms and conditions based on the claimed O&M costs are reasonable under the relevant statutory criteria.

E.2.4. Network planning costs

The ACCC continues to hold the view about network planning costs that it detailed in its model price terms and conditions and assessment of Telstra's core services undertakings reports. It considers that network planning costs are hypothetical costs that would be incurred by an access seeker should it develop an alternative network. They are not costs Telstra needs to recover,[169] and should therefore not be included in calculating TSLRIC of the network. Allowing Telstra to recover costs it does not actually incur is not consistent with the legislative criteria and conflicts with LTIE.

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[167] It is not entirely clear what Telstra means by its historical costs in this setting.

[168] The method employed by Telstra to calculate its claimed network planning costs would similarly result in these costs being reduced by efficiency adjustments to direct O&M costs.

[169] Telstra has developed its network over a long period of time, with the costs of planning long recovered.

Telstra asserts in support of its ULLS submission that, while it considers that it should be able to recover these costs, all it is in fact claiming are those costs actually incurred by it in the normal extension of the PSTN.

In this regard, the ACCC has previously held the view that although recovery of these costs associated with the ongoing maintenance and replenishment of infrastructure is appropriate, any such costs should be appropriately covered by operation and maintenance costs which are allowed for by the ACCC.

Telstra asserts that this is factually incorrect, stating that O&M costs claimed by Telstra exclude any network planning costs.

The ACCC reiterates its previous position that it is most appropriate and likely that these costs are currently being recovered from O&M costs. While Telstra claims that the ACCC's position is factually incorrect, the ACCC notes that this discrepancy in view has primarily arisen due to Telstra's inadequate explanation of the way in which it is calculating all categories of O&M costs as discussed in section E.2.3. Further, Telstra initially claimed that the network planning costs category was in fact intended to recover the costs of planning the entirety of the network, however that it was conservatively estimating these costs in line with its current level of expenditure on network planning.

Given Telstra's initial justification for the separate inclusion of this cost category, as well as the difficulties associated with Telstra's explanations of its O&M methodology, the ACCC remains concerned that Telstra may be over-recovering its current expenditure on network planning costs.

E.2.5. Trench sharing

Trench sharing has the overall effect of reducing the cost of trenches in the provision of PSTN services. This can occur in two main ways, reflecting the two basic types of trench sharing.

First, there is sharing which reduces the total trench length. This comprises:

- sharing within a network, e.g. within the feeder network
- sharing between feeder and distribution networks
- sharing between the customer access and conveyance networks.

Second, there is sharing that reduces the costs that should be allocated to PSTN services. This comprises:

- sharing with other telecommunications carriers and Pay TV operators
- sharing with utilities in new estates.

Telstra has not responded to any of the ACCC's expressed concerns regarding its preferred approach to trench sharing other than to reject this preferred approach only in relation to trench sharing in new estates.

Trench sharing in new estates

Telstra continues to assert that the ACCC position on trench sharing in new estates is 'manifestly unjustifiable'. Telstra maintains that only 1 per cent of trench costs can be excluded to allow for new estates.

As consistently stated by the ACCC, it believes that the scorched-node methodology that is considered appropriate in determining TSLRIC prices dictates that the level of trenching in new estates should reflect both Telstra's past ability to share trenches with utilities in new estates, and its ability to share over the regulatory period. This is because the appropriate network modelled should be Telstra's network, as it would look if it were optimised, and not a hypothetical new entrant's network. Thus, the ACCC continues to believe that an assumed value of 13% for new estates, while conservative, is appropriate.

Further, Telstra's claims that assumptions greater than 1 per cent should be rejected due to the way in which these percentages are allocated by the model,[170] are not sufficient justification for adopting Telstra's preferred value. In addition, Telstra has explicitly noted that the PIE II model is not robust to changes in trenching assumptions greater than 5 per cent. The ACCC continues to believe that these arguments represent flaws in the way in which the PIE II model is constructed rather than flaws in the ACCC's preferred values, and further act to preclude the ACCC's acceptance of the model. The ACCC would welcome any attempts by Telstra to adjust the way in which new estates are allowed for in its modelling to address these modelling difficulties.

E.2.6. Network design parameters

As noted above, the ACCC continues to be concerned that the architecture of the network as devised by the PIE II model is far from optimal. CRAI, on behalf of Telstra, has responded to some of the ACCC's concerns.

Rectilinear distance estimation

Trench distances in the PIE II model are calculated using unadjusted rectilinear estimates. As noted above, while the ACCC does not advocate the use of straight-line estimates, it is far from clear that rectilinear distances are appropriate to the extent asserted.

Telstra has commissioned advice from CRAI on the appropriateness of its use of rectilinear distances in the PIE II model. CRAI states that:

> In most cost models, one or two estimates are generally considered: Cartesian (direct) distance measures, and rectilinear measures. Some models use only one of the two estimators, others use both and give the model user the *option of choosing.* Irrespective of which metric is used, the measurement formula *must be parameterized with a correction factor* that reflects local geographic conditions that relate the estimated road distance to actual distance.[171] (emphasis added)

The PIE II model does not provide users with a choice of estimation method. Further, Telstra does not appear to have applied any correction factors to its rectilinear estimators. In relation to the appropriate correction factor to be applied, CRAI states that:

> Literature on estimating distances establishes that, *on average*, rectilinear distance has a correction factor approximately equal to 1, although admittedly with a higher variance

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[170] The PIE II model allocates the 1 per cent deduction on an equal fashion across all ESAs. Thus Telstra concludes that it is unreasonable to assume that values higher than 1 per cent for CBD, or rural and remote areas could reflect the realities of development in these areas.

[171] M. Kennet and B.M. Mitchell, *Confidential Commentary on PIE II Model Assumptions (Public Version)*, CRA International, May 2005, p. 4.

> than direct distance. Thus, a reasonable decision can be made preferring to use the uncorrected rectilinear metric instead of the Cartesian metric, since the result that the correction factor is, *on average*, the value 1 means that it is unnecessary to estimate more accurate values as would be necessary in using the Cartesian metric, where the average correction factor differs from unity.[172] (emphasis added)

The ACCC notes that this is not an argument in favour of the use of an uncorrected rectilinear estimate. Rather, it is an argument in favour of preferring one uncorrected measure over the other. As such, it does not state that it is appropriate for Telstra to adopt an uncorrected rectilinear estimate, only that this would be preferable to an uncorrected Cartesian estimate.

The ACCC notes that, as readily acknowledged by CRAI, while failing to correct rectilinear estimates may *on average* be reasonable, the higher variance associated with such estimates means that the ACCC cannot be confident that the approach to modelling distances in the PIE II model will yield reasonable estimates. The ACCC recommends that Telstra provide the ACCC with sufficient evidence to justify the use of a single method of distance estimation, and further analyse the required correction factor in order to appropriately estimate the required distances. In the absence of such evidence, the ACCC would find it difficult to accept the reasonableness of Telstra's preferred approach.

Minimum spanning trees

The PIE II model utilises a Minimum Spanning Tree (MST) algorithm to estimate trench distances. Previously, the ACCC has expressed concerns regarding the optimality of the approach adopted. In particular, it notes that this algorithm may produce results inferior to other algorithms available. n/e/r/a on behalf of Optus previously noted that the introduction of additional points of connection, called Steiner nodes, was likely to improve the optimality of network design relative to the straight MST approach preferred by Telstra.

CRAI's recent work for Telstra confirms that this is the case:

> While the [MST] approach guarantees the minimum structure cost for building a network assuming that the only points of connection between "tree" branches are the RAUs and POCs, in the real world additional points of connection are feasible and often preferable… Clearly, the Steiner solution will, in general, reduce total distance.[173]

The ACCC acknowledges that the introduction of more sophisticated algorithms has the potential to increase computational complexity, however, given the potential improvements in network optimality which may result the ACCC believes that it is not appropriate for Telstra to continue to advocate its preferred approach as being optimal. Examples of difficulties in applying the approach, such as those given by CRAI (ie. the placement of the Steiner node in an unfeasible geographic point such as the centre of a lake) are insufficient justification for summarily rejecting the Steiner solution.[174]

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[172] *Ibid*, p. 5.

[173] *Ibid.*, pp. 1-2.

[174] For example, it is easy to construct a scenario in which a Steiner node would in fact be realistic, whereas the MST would not. If the lake in question intersected the connecting line between two points on the MST, then clearly this approach would also be totally unrealistic. However, if in this scenario the placement of the Steiner node was feasible (ie. any point not in the lake) then the Steiner solution would be more optimal, and additionally the only feasible outcome.

E.2.7. ACCC use of the PIE II model

Given the continuing difficulties with the model, the ACCC has only used the PIE II model in a limited sense, and in the absence of a reasonable alternative.

In assessing ULLS network prices, it has been necessary to rely on PIE II to an extent. As previously noted in the 2004 Final Determinations, the ACCC was inclined to accept adjusted PIE II estimates of ULLS costs as they compared favourably with previous prices and were based on a network architecture that was optimised to a greater extent than required according to the ACCC's pricing principles or previous n/e/r/a model.[175] However, this limited acceptance was predominantly in the context of urban distributions areas (DA) – which are those areas most likely to see growth in ULLS – where PIE II uses a network architecture that is much more akin to the n/e/r/a model. Specifically, PIE II uses average trench and copper lengths based on a 'representative DA'. The ACCC is therefore more inclined to accept that PIE II produces a reasonably robust estimate of ULLS costs in these areas.

However, the ACCC's inclination to accept estimates produced by the PIE II model (appropriately adjusted) in specific ULLS regions should not be construed as full acceptance of the model. In particular, the ACCC's concerns as expressed above continue to hold, and further, the ACCC notes that acceptance of its estimates is less likely to extend to regions beyond Band 2 in light of these concerns.

PIE II is therefore not accepted by the ACCC as a means of determining prices for the ULLS in accordance with the statutory criteria. Rather, the ACCC, having adjusted the model where feasible in relation to certain assumptions,[176] considers that the resulting estimates produced represent no more than an extremely conservative upper bound on the appropriate level of network costs. However, Telstra continues to employ assumptions which the ACCC has previously noted are not reasonable, and thus its claimed network costs in relation to the current undertakings are unlikely to be reasonable under the statutory criteria.

E.3. Responses to the ACCC's draft view

Telstra was the only respondent to the ACCC's draft view on network costs. Telstra stated that:

> Telstra submits that by rejecting the PIE II model and failing to rely on its own TSLRIC model, the NERA model, the Commission's Draft Decision fails to give adequate weight to the statutory criterion requiring the consideration of the direct costs of providing the service to competitors and fails to provide any sound basis for its decision to reject Telstra's undertaking with respect to network costs.[177]

Telstra also states that:

> … the Commission notes its concern that Telstra has not adjusted the PIE II model in response to criticisms made of the model by the Commission and other industry participants. Telstra submits that this is irrelevant to the consideration as to whether

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[175] See discussion below.

[176] It is not possible to adjust numerous variables within the model. Further, as noted by Telstra, the model itself is not robust to specification changes and therefore the ACCC has interpreted the resulting estimates with caution.

[177] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, p. 6.

> Telstra's ULLS monthly charges are reasonable under the statutory criteria. The reason that Telstra has not made these changes is that Telstra disagrees with these changes. Telstra believes it is entitled to use input parameters and assumptions in its model that it believes are most accurate.[178]

E.4. ACCC's final view

The ACCC has consistently acknowledged the difficulties and complexities inherent in any cost modelling process. The ACCC has consistently stated that it does not agree that Telstra has discharged its onus to provide sufficient documentation, and supporting evidence for the assumptions it has employed in its PIE II model.

The ACCC notes, in this regard, that its Draft Decision on network costs specifically requested Telstra to provide further clarification on a range of issues, or for Telstra to adjust a subset of variables in a manner consistent with the ACCC's view as to the reasonable range for these variables.

Telstra is entitled to put forward its view as to the appropriate level of network costs, and indeed its PIE II model is constructed for this very purpose. However, the ACCC is guided by the requirements of the statutory criteria, and as such, is bound to independently assess Telstra's claims on their merits.

The ACCC has clearly expressed on numerous occasions that it has difficulty accepting the PIE II model in general, and has raised concerns with respect to specific variables. The ACCC acknowledges, as noted by Telstra, that it is yet to advance its own model in preference to PIE II. The ACCC clearly outlined in its draft view, and on numerous previous occasions, why it has continued to rely on a partially-adjusted PIE II model to determine the conservative upper bound of network costs. However, the ACCC continues to believe that, given its strong concerns relating to those aspects of the model which cannot be externally adjusted, PIE II cannot be accepted while Telstra continues to reject recommendations for change. Further, to the extent that Telstra continues to submit network cost claims in accordance with its preferred variables which *can* be adjusted, the ACCC will continue to give consideration to the appropriateness of those variables and will ultimately seek to rely on values it considers appropriate.

The ACCC notes that Telstra has partially responded to the ACCC's draft views on the above range of modelling assumptions. The ACCC notes that in some areas Telstra and its experts have provided the clarification sought by the ACCC, but that in other areas its clarification is either insufficient, or its continued justification of its preferred assumptions is considered to be at odds with the statutory criteria.

For example, on areas of clarification, the ACCC acknowledges the extensive response produced by Telstra on the network planning costs issue. The ACCC rejects Telstra's position that it should be entitled to recover network planning costs incurred by a hypothetical new entrant, however it accepts that it should be able to recover the costs it currently incurs through O&M factors. The ACCC therefore accepts that if there is no double-counting in the model, Telstra's method - while not ideal - could be acceptable. The ACCC reiterates that this should not be construed as acceptance of

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[178] *Ibid*., p. 51.

Telstra's claims for an allowance for network planning costs equivalent to that incurred by a hypothetical new entrant.

However, in other areas Telstra has not provided the clarification sought, or has provided conflicting evidence. For example, in relation to the use of uncorrected rectilinear distance estimates, Telstra has not provided further justification as to why its failure to apply a correction factor is acceptable. Further, Telstra's expert Bridger Mitchell has provided additional evidence in response in direct conflict with that he produced in his initial expert report. As outlined above, Mitchell stated quite clearly that Cartesian estimates had a lower variance relative to rectilinear estimates, whereas now he claims the opposite is in fact the case – while referring to the same article in both cases to support both views.[179] A review of the source article indicates that Mitchell's original interpretation was correct. This has meant that Mitchell's revised statements, and indeed many of Telstra's statements which appear to be based on the evidence of Mitchell, cannot provide any useful clarification on this issue. The ACCC therefore reiterates its view as expressed in the draft decision that Telstra needs, at a minimum, to analyse and apply an appropriate correction factor to its rectilinear estimate, and/or examine alternative estimation techniques to determine whether or not they provide more optimal solutions before the ACCC could accept Telstra's estimate as reasonable.

While Telstra's response has provided partial clarification with regard to the ACCC's concerns, its response nevertheless is insufficient to change the ACCC's overall rejection of the PIE II model. The sole revision capable of being made to the ACCC's partially adjusted conservative upper-bound estimate is to accept the currently proposed network planning cost allowance.

In considering the network costs claimed by Telstra the ACCC considers the pricing outcome under the undertaking will achieve less satisfactory outcomes with respect to the statutory criteria than the outcome in the event the undertaking was rejected, which the ACCC considers will likely lead to charges based on more reasonable cost arguments. More particularly, the ACCC considers it is not satisfied that price terms and conditions based on Telstra' claimed costs of the underlying network assets used in the provision of the service are reasonable. In summary, the ACCC considers that to the extent the price terms and conditions in the undertakings are based on Telstra's claimed network costs, those terms and conditions:

- are unlikely to promote the LTIE, as they will not promote competition and will not encourage the economically efficient use of, or investment in infrastructure
- result in Telstra recovering more than is necessary to promote Telstra's legitimate business interests
- would harm the interest of access seekers, and the persons who have rights to use the service would be limited in their ability to compete
- exceed the direct costs of providing access

[179] R.F. Love, J.G. Morris and G.O. Wesolowsky, 'Mathematical Models of Travel Distances', in *Facilities Location: Models and Methods, Amsterdam: North Holland,* 1988, Tables 10.1 and 10.2.

- do not have a material effect on the operational and technical requirements necessary for the safe and reliable operation of the service.

The ACCC's final view, in line with the reasons set out above, is to refer to a partially-adjusted PIE II model for the purposes of producing estimates which represent an extremely conservative upper bound of a reasonable estimate of TSLRIC+ network costs for the ULLS. The ACCC's estimates are outlined above in section 6.4, incorporating an adjustment following the Draft Decision with respect to network planning costs. As Telstra's claimed network costs lie above this bound, the ACCC's final view is to reject this component of Telstra's Undertaking as being inconsistent with the statutory criteria. That is, the ACCC is not satisfied that price terms and conditions that seek to impose charges based on Telstra's claimed network costs are reasonable.

Appendix F. Submissions on recovering ULLS-specific costs across a broader range of services

F.1. Comments by Telstra

As outlined in section A.1.2, under any circumstance, Telstra's undertakings are not reasonable. These include both Telstra's and ACCC's preferred approaches, as well as other possible approaches to recovering ULLS-specific costs. However, through its submissions, rather than addressing the ACCC's conclusions, Telstra focuses only on why option F, which is distributing ULLS-specific costs over all lines, is not appropriate and attempts to turn the argument back on the ACCC to justify this option. Telstra argues that the approach under option F is inappropriate, and therefore Telstra's approach and proposed prices are reasonable. Further, Telstra's submission appears to take the view that it is the ACCC that has the onus to show why option F to the recovery of ULLS-specific costs is justified under the regulatory criteria.

While they are often disjointed, the ACCC has narrowed down Telstra's claims in four key points:

- Telstra claims that ACCC's preferred approach to distributing ULLS-specific costs will result in greater efficiency losses than gains due to a deadweight loss reduction.
- Telstra believes that this approach is also tantamount to taxation of Telstra's retail customers to subsidise access seekers. To this end, Telstra has provided a submission by Gregory Sidak to argue on its behalf.
- Telstra believes that ACCC's preferred approach to distributing ULLS-specific costs would not be followed in a competitive market. To illustrate this, Telstra outlines two analogies.
- Telstra claims that the ACCC has misrepresented the size and nature of Telstra's costs, and as a result, ACCC's analysis is incorrect.

These claims are discussed below.

F.2. Comments by other parties

Several other parties provided comment on the ACCC's draft view on ULLS-specific costs. Optus agrees that the costs should be spread over all CAN lines. In reaching its view, Optus identifies both a private and public benefit resulting from the introduction of ULLS, and argues that as all users of fixed lines services benefit from ULLS, costs should be recovered off all CAN users. Optus also provides comments on the alternative funding options; recovering costs from ULLS access seekers alone (the Telstra option); recovering costs over all DSL-capable lines; and recovering costs from all lines that were ever used by ULLS. Optus views all these alternatives as inferior to the all-lines approach.

The following quote from Optus highlights the importance of implementing such a proposal:

> Any other recovery method would give rise to an unequitable distribution of costs. This could, in turn, inefficiently distort ULLS consumption and reduce the level of benefits generated by the service.[180]

Macquarie Telecom (Macquarie) also agrees that ULLS-specific costs should be recovered from the widest possible base – 'across all active CAN lines'.[181] Macquarie argues that this is consistent with the fact that 'all customers benefit from the potential availability of ULLS even if they do not utilise it themselves'.[182] Macquarie argues that the ULLS service will 'create an incentive for Telstra to improve its own service offerings to match those made available by competitors', thus the ULLS will provide a benefit to customers who don't directly take up ULLS.[183] Macquarie states that these benefits may accrue in the form of lower prices and improved services to all consumers.

Furthermore, Macquarie argues that the "ULLS specific costs claimed by Telstra in its undertaking do not represent the costs which would be incurred by an efficient operator in providing the ULLS services… and are designed in part to prevent access seekers receiving equivalent service to that provided by Telstra to itself".[184]

The Competitive Carriers Coalition (CCC) quotes the Government saying that the objectives of operational separation – equivalence and transparency to Telstra's wholesale customers – will not be met if Telstra's ULLS-specific cost recovery proposal is accepted. It states

> if, as proposed by Telstra, specific costs were recovered only from access seekers, the concept of equivalence would be fatally undermined.[185]

Continuing, the CCC points out that it seems contradictory that

> consumers acquiring services from competitors to Telstra would bear all the costs of providing competition, while consumers acquiring services from Telstra would bear none.[186]

The CCC is also concerned that the ULLS specific cost recovery method proposed by Telstra in its Undertaking would create 'the opportunity for sabotage'.[187]

F.3. ACCC's response to Telstra's claims

F.3.1. Efficiency argument

The crux of Telstra's argument can be found in the statement, which claims that under the all lines approach:

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[180] Optus, *Telstra's ULLS Monthly Charge Undertaking*, 29 August 2005, p. 2.

[181] Macquarie Telecom, *Macquarie Telecom – Response to Draft Decision on Telstra's ULLS and LSS Monthly Charges*, 12 September 2005, p. 2.

[182] *Ibid*.

[183] *Ibid*.

[184] *Ibid*., p. 3.

[185] Competitive Carriers' Coalition, *Submission to the ACCC Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, August 2005, p. 4.

[186] *Ibid*.

[187] *Ibid*.

> …waste in production and efficiency costs due to oversupply associated with the Commission's tax/subsidy scheme are likely to outweigh the efficiency gains the Commission claims will occur due to lower prices under its approach..[188]

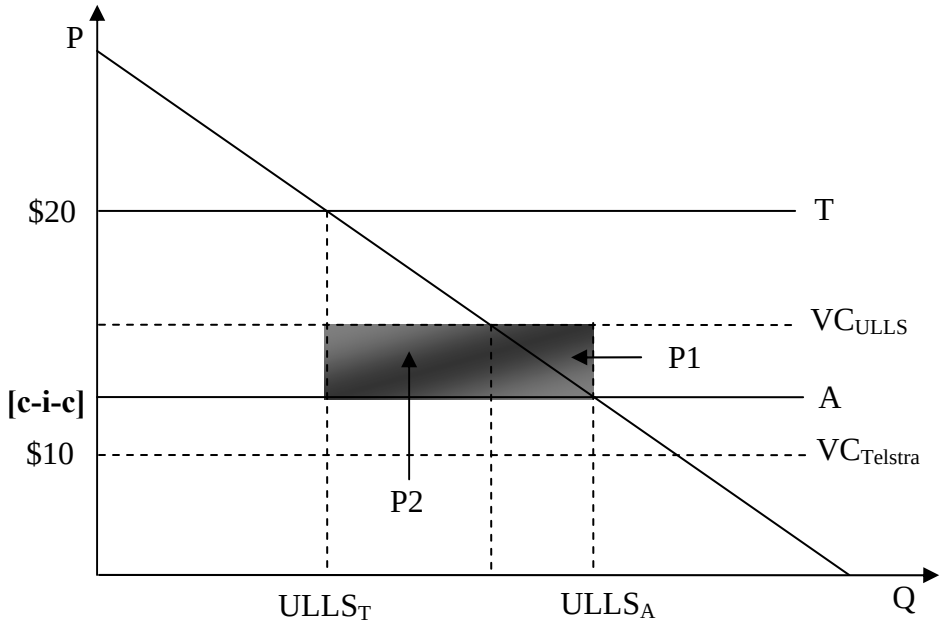
To illustrate this, Telstra uses two diagrams, one representing the retail market for access services, and the other the wholesale market for ULLS. Telstra then uses the first diagram in its 'back of envelope' calculations of possible reductions of deadweight loss, and the second diagram to calculate associated efficiency losses.

Telstra's back of envelope calculations claim that a $5.9 million dollar possible reduction in deadweight loss is associated with a $14.7 million inefficiency loss. However, Telstra does not provide sufficient information to justify these figures. For example, Telstra does not provide an indication of its view of variable ULLS cost that the ACCC is supposedly not allowing it to recover.

A further curiosity is that Telstra claims inefficiency losses of $14.7 million.[189] However, the amount of ULLS-specific costs that the ACCC supposedly does not allow Telstra to recover is only approximately **[c-i-c]** per annum (this is the annualised amount of **[c-i-c]** in total ULLS-specific costs over 5 years). The difference between what Telstra terms variable ULLS costs (VC_{ULLS}) and variable Telstra costs ($VC_{Telstra}$) is a **fixed** amount of ULLS-specific costs. It is not clear how a disagreement over the recovery of a **fixed** amount of approximately **[c-i-c]** (for explanation of why this amount is fixed with respect to demand for ULL services, see analysis below) can cause an inefficiency loss greater than the amount itself.

Telstra uses the following diagram for the wholesale market for ULLS, to justify the inefficiencies due to the all lines approach:

Figure F.3.1. Telstra's version of the wholesale market for ULLS (a)



[188] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, Appendix B, p. 6.

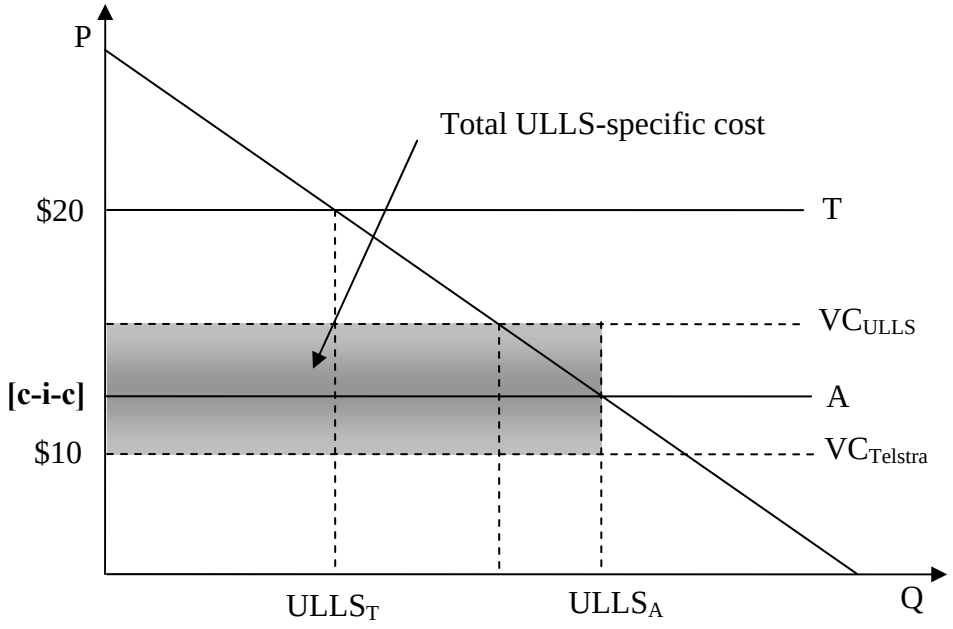
[189] Due the lack of clarity regarding this calculation, the ACCC is uncertain whether this is an annual figure, or a figure for the two year period of the undertakings.

Telstra argues that the shaded area (i.e. P1+P2) equals $14.7 million. However, there is a flaw in Telstra's analysis. Even if ULLS-specific costs were to be recovered over all ULLS (which the ACCC believes to be inferior to a broader-based approach), the difference between what Telstra labels as VC_{ULLS} and $VC_{Telstra}$ would be such that

Annual ULLS-specific cost = $(VC_{ULLS} - VC_{Telstra}) \times ULLS_A$ = **[c-i-c]**

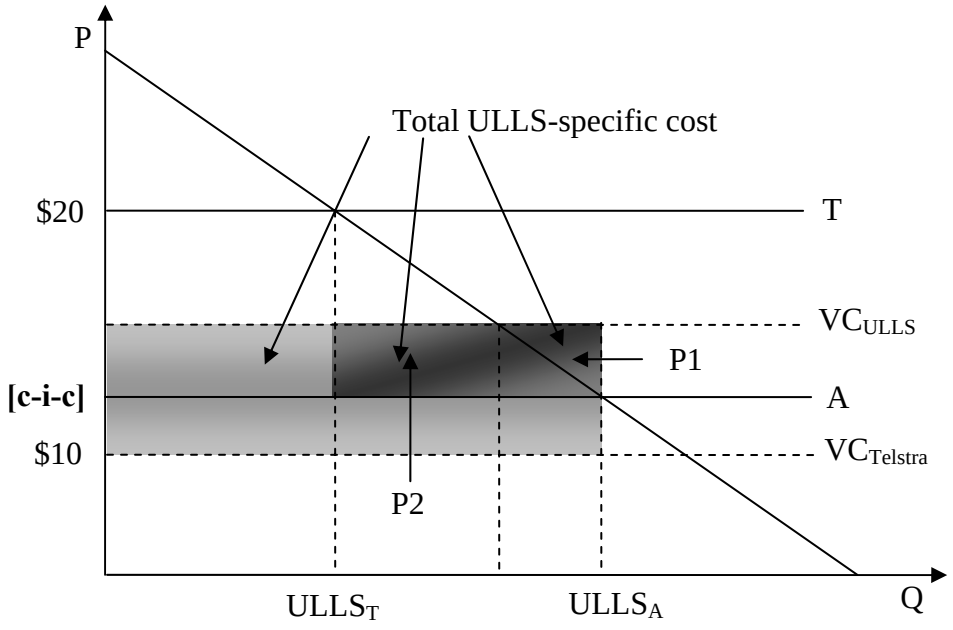
As this cost is fixed with respect to demand for ULLS, the VC_{ULLS} line would move up if the ULLS demand fell, and move down if it increased. The **[c-i-c]** cost can be represented by the shaded area in the following diagram.

Figure F.3.2. Telstra's version of the wholesale market for ULLS (b)



Combining the two diagrams, we get the following result

Figure F.3.3. Telstra's version of the wholesale market for ULLS (c)



The idea that the inefficiency due to an access price that could be set,as demonstrated by the dark shaded area can be $14.7 million while the entire shaded area (dark and light shaded) amounts to **[c-i-c]** does not bear rigorous scrutiny.

In any case, a major deficiency in Telstra's analysis is the comparison between a gain in the retail market for all lines, while the supposed inefficiency loss is calculated by considering only part of the wholesale market for lines – a "wholesale market for ULLS". Telstra attempts to define a separate market for ULLS and by assumption confines all ULLS-specific costs to that market. As a result, the deadweight loss reduction is calculated with respect to a market where Telstra claims price elasticity of demand is –0.01, while the inefficiency loss is calculated with respect to a market where elasticity is 200 times greater. However, looking at a separate market for ULLS is incorrect. The appropriate wholesale market to consider is the market for all lines – ULL lines and those Telstra supplies to itself. Therefore, Telstra's Figure 2 is unnecessary and the impact of ACCC's preferred approach versus Telstra's proposed approach can be assessed by considering the example of the retail market for access services, put forward by Telstra. This is done below.

Further, Telstra's entire calculation of supposed inefficiencies resulting from the ACCC's preferred approach are based on the assumption that this approach will set access prices below the variable cost of production of ULLS. This assumption is also incorrect. As is demonstrated by the analysis of ULLS-specific cost recovery options, below, the ACCC's preferred method would price ULL services **at** long run variable costs of provision (measured using the widely accepted TSLRIC methodology). i.e. VC_{ULLS} and $VC_{Telstra}$ lines are one and the same.

Telstra's deadweight loss reduction and elasticity estimates

The analysis that follows illustrates that there are greater deadweight loss reductions possible by recovering the ULLS-specific costs over a greater number of lines than simply ULL services. However, it is first worth analysing Telstra's claims for the amount of the reduction in the deadweight loss. A key assumption in this calculation

is the estimate of the price elasticity of demand of retail lines. To derive this elasticity, Telstra points to the following studies:

1. A study of US elasticity of from 1984 to 1988
2. A 1986 study of elasticity in the US
3. A 1981 mimeo reporting elasticities in Australia
4. A 1988 study reporting elasticities for business lines.

The appropriateness and relevance of this range of studies is not immediately clear. First, two studies do not relate to the Australian market and second, another considers only the business part of the market. Businesses traditionally have a substantially lower elasticity of demand for lines. Further, as discussed below, all of the above studies relate to the 1980s, before mobile telephony and other technologies had an impact on the market for fixed lines.

Telstra's use of this range of studies has not been justified. Telstra has not sought to explain in any way why is has chosen such a narrow range of elasticity studies, particularly given the highly disparate nature of these studies. Telstra's use of these estimates is highly suspicious, and appears to be critical to its purported analysis as only a highly inelastic estimate will drive its desired results.

If Telstra considers that both the introduction of international estimates, as well as the time period from which its estimates are drawn is appropriate, then it is not clear why it has chosen to limit its range of studies in this way. As Telstra would be fully aware, there is a wide range of elasticity estimates for retail market access, which have been widely documented. For example, the World Bank, in its *Telecommunications Regulatory Handbook*, employed an assumed elasticity of –0.10, with a range of ±0.09.[190] More recently, a study submitted by Vodafone to the New Zealand Commerce Commission reported on a number of studies to arrive at a range for the relevant elasticity estimate of –0.02 to –0.10, although the range of estimates used and their applicability was questioned by other industry stakeholders.[191] In the former case, Telstra has chosen studies which support only the extreme end of the assumed range without justification, and in the latter case its assumed value lies outside the range.

It is widely accepted that with the advent, and rapid spread of mobile telephony, there has been a substantial change in the market for fixed lines. Substitutability of fixed copper lines with mobile telephones, cable access or wireless access is likely to have resulted in greater elasticity of demand for fixed lines than has previously been the case.

Setting aside the fact that Telstra's efficiency argument has been incorrectly specified, it is clear the impact Telstra's preferred elasticity assumption for the retail market has on its analysis. Telstra calculates the reduction in deadweight loss to be $5.9 million and the productive inefficiency from ULLS supply at $14.7 million. The $5.9 million figure is derived using an elasticity estimate of –0.01, based on the overtly narrow

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[190] World Bank, *Telecommunications Regulatory Handbook*, November 2000, Appendix B, p. B-10, Washington DC.

[191] Vodafone, *Review of Price Elasticities of Demand for Fixed Line and Mobile Telecommunications Services*, August 2003, p. 6.

range of studies as identified above. Considering Telstra's calculation, it can be shown that only a minor increase in the elasticity, to –0.03, will triple the reduction in deadweight loss that outweighs claimed inefficiency losses. It is clear that even if Telstra's analysis was correctly specified in all other ways, any reasonable value for this elasticity assumption would result in efficiency gains, not losses. For example, adoption of the World Bank's preferred values would likely result in substantial efficiency gains, even under Telstra's mis-specified analysis.

Telstra's highly questionable approach to the estimation of retail market demand elasticities is of significant concern, and is a key factor in the ACCC's rejection of Telstra's purported efficiency analysis of different approaches to the treatment of ULLS-specific costs..

Telstra implies that ACCC's view is pricing below cost

This is incorrect. As outlined below, none of the methodologies outlined by the ACCC are pricing the ULLS below cost, thus there are no productive inefficiencies.

Appropriate analysis of ULLS-specific cost recovery options

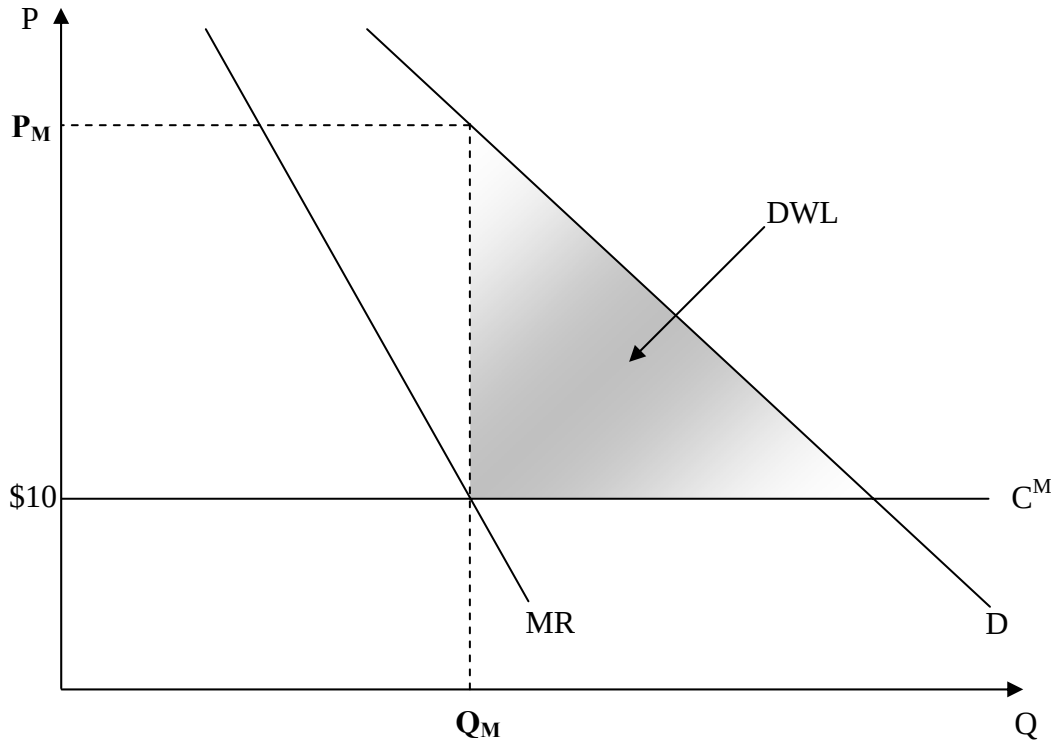
An appropriate analysis of the effect of various ULLS pricing options on the retail market needs to begin with the examination of the market as it would look like if Telstra was not a regulated company, and it was not required to supply ULLS to access seekers. For simplicity, the analysis assumes that Telstra's long run variable cost of an unconditioned local loop is $10, as assumed in Telstra's submission. The cost of a local loop in a particular Band can be roughly calculated as the total cost of Telstra's network in that Band divided by the total number of local loops in use.[192]

Telstra as an unregulated entity

Without regulation, Telstra would be a monopolist and would be able to behave as such. This is represented in Figure F.3.4 below. As with Telstra's analysis, for simplicity, it is assumed there are no additional retail costs.

[192] For the purposes of this analysis, we will assume there is only one Band.

Figure F.3.4. Retail market with Telstra as an unregulated entity



where C_M = Long run incremental cost of a local loop to Telstra (=$10)

P_M = Price Telstra would charge for a retail service

Q_M = Quantity produced

DWL = Deadweight loss

D = Demand for retail lines

In this example, Telstra's TSLRIC (i.e. cost of the network) is $10 × Q_M (per month).

Declaration of the ULLS and ULLS-specific costs

As a result of declaration of the ULLS, Telstra was required to:

- develop and operate an IT system to deal with ordering and provisioning of ULLS to access seekers
- set up a ULLS connection group costs.

This resulted in Telstra incurring the following ULLS-specific costs:

- IT system development and operational costs
- ULLS connection group costs
- Wholesale Management costs
- Indirect costs.

By far the largest component of the ULLS-specific cost is the IT system development and operational cost, accounting for over 82 per cent of the total ULLS-specific cost. This cost does not vary with the number of ULLS customers. Further, Telstra's wholesale management costs also do not vary with demand:

> Telstra's ULLS specific cost model includes estimates of wholesale management costs. According to Telstra, the function requires personnel at different levels in the wholesale management group with a combined level of involvement equivalent to two full-time project managers at a rate of **[c-i-c]** per annum each. The model assumes that these costs are fixed (do not vary with demand).[193]

With regard to ULLS connection group costs, ACCC's consultants, Communications and Media Policy Institute of the University of Canberra ("CMPI"), stated that:

> Our assessment is that two staff could reasonably be required to process ULLS Connections at all levels up to 10,000 connections per annum. Above that, it would be reasonable to expect staff requirements to increase at the rate of 5,000 connections per staff per year (the minimum efficient rate implicit in Telstra's estimates) rising to 5 staff completing total annual connections of 25,000. Above 25,000 connections, increased automation should lead to further efficiencies so that it would be reasonable to assume a gradual increase in total staff numbers to 10 as connections grow to 100,000 per annum (approximately 45 connections per person per day). Consistent with Telstra's assumptions, we propose that no further staff increases be envisaged to handle connection rates greater than 100,000 per annum.[194]

Therefore, for connections group costs are expected to be fixed at their maximum for the year 2005-06.

Finally, indirect costs are calculated as a mark-up, therefore, it is reasonable to assume that the ULLS-specific cost is not variable with demand.

As a result of ULLS-specific costs, the total cost of owning local loops increases, as anyone who rolls out copper cables is required to provide the unconditioned local loop service unless exempted. The total ULLS-specific cost to Telstra was calculated by the ACCC's consultants to be less than **[c-i-c]**, which equates to approximately **[c-i-c]** per month over 5 years.[195] The ACCC sees no reason why ULLS-specific costs should be treated differently to other network costs, as they are incurred by any owner of a copper based access network faced with a regulatory obligation. The TSLRIC of the network should therefore include all ULLS (and LSS) specific costs.

Therefore, due to the declaration of the ULLS, Telstra's TSLRIC of providing lines increases from $\$10 \times Q$ per month to $\$10 \times Q$ + **[c-i-c]** per month, and the unitised long run incremental cost shifting from

$C^M = \$10$

to

$C = \$10 +$ **[c-i-c]**$/Q$

In this example, under Telstra's proposal the price of provision of lines would fall to $20. This would result in a cost of provision increasing to $C^C_T = \$10 +$ **[c-i-c]**$/Q_T$ (or **[c-i-c]** in total) and reduction in deadweight loss indicated in Figure F.3.5. Note that under this proposal, Telstra continues to price (P_T) well above cost of production (C^C_T), which results in a super-normal profit $(P_T - C^C_T) \times Q_T$, with substantial deadweight loss remaining.

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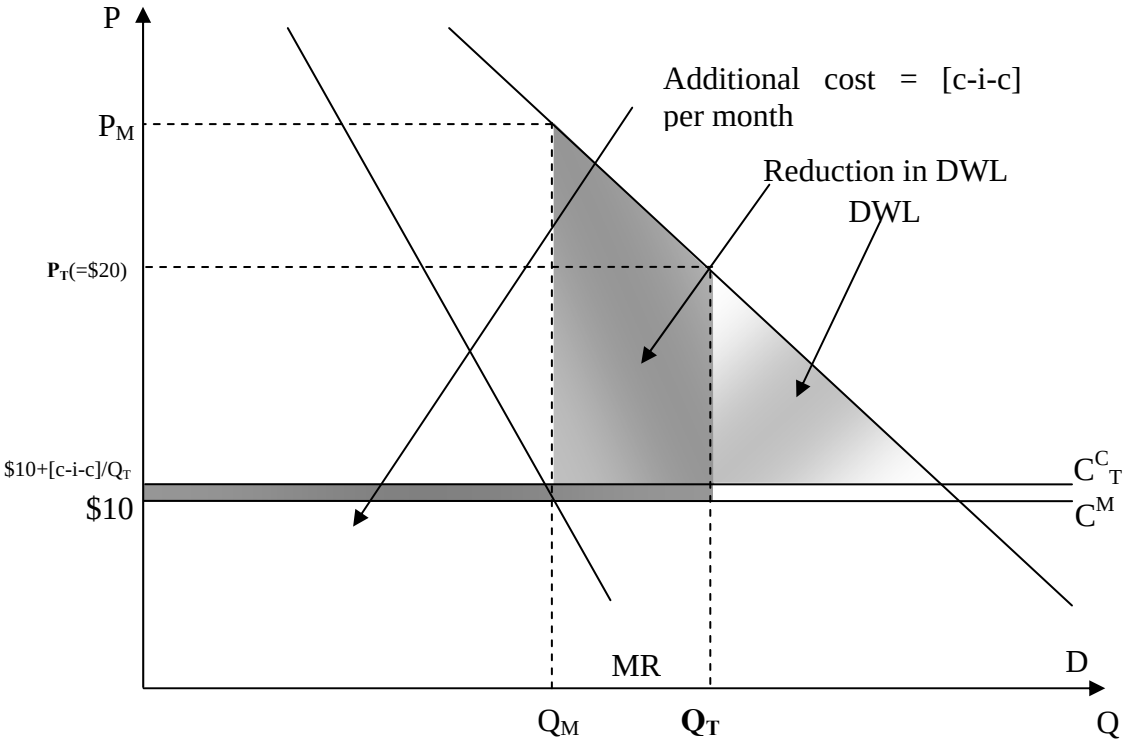
[193] CMPI and AASC, *Review of Telstra's ULLS-specific Costs – Draft Report*, p. 27.

[194] *Ibid.*, p. 29.

[195] Again, for the purposes of this analysis we are assuming there is not LSS service, but the analysis holds if monthly LSS-specific cost is added to ULLS-specific cost.

Figure F.3.5. Retail market with Telstra supplying ULLS under its proposal



Averaging ULLS-specific costs over all ADSL lines

While providing ULLS reduces the deadweight loss by increasing output at lower prices, the above proposal still results in a substantial deadweight loss remaining. If ULLS-specific costs are distributed over all ADSL lines, a further reduction in deadweight loss can be achieved at **no additional cost**. This is illustrated in Figure F.3.6 below. While there is no additional cost to Telstra, the unitised incremental cost falls to

C^C_{AD} = $10 + **[c-i-c]**/$Q_{AD}$

and quantity of lines provided increases to Q_{AD}. The further reduction of deadweight loss is illustrated in Figure F.3.6 by the area between Q_T and Q_{AD} of the "reduction in deadweight loss". The retail price falls to

P_{AD} = $10 + **[c-i-c]**/all ADSL lines

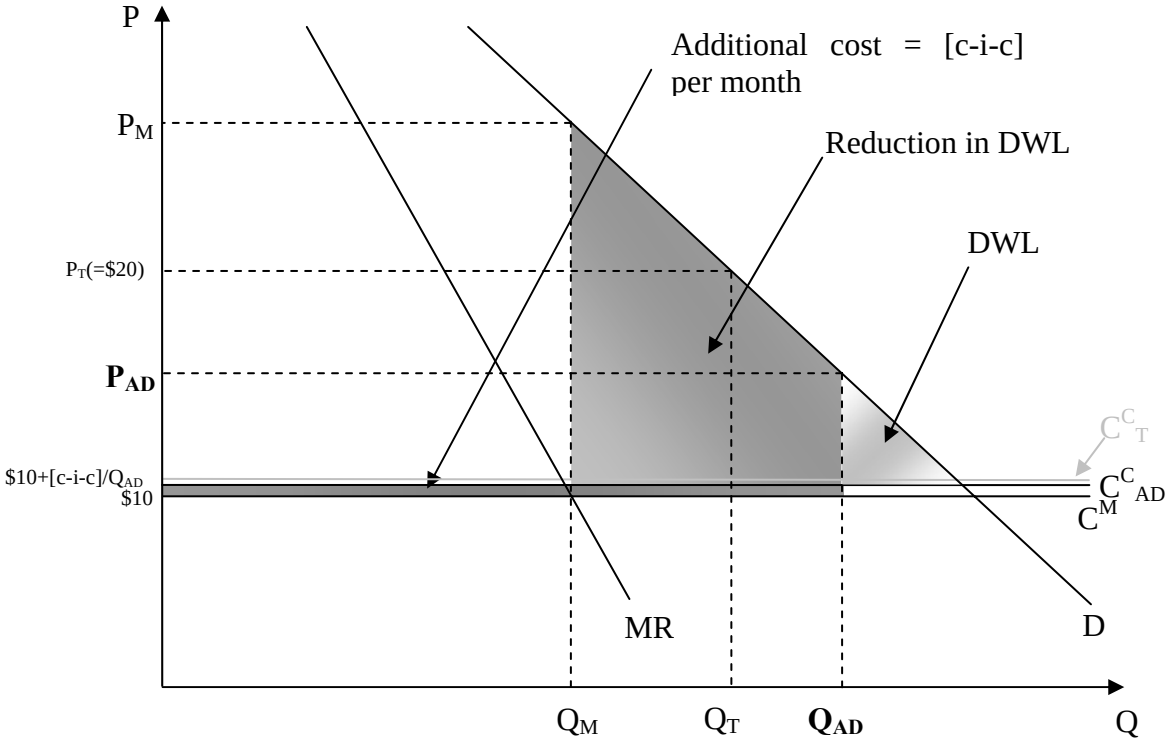
and the super normal profit falls to

[c-i-c] × (1/all ADSL lines – 1/Q_{AD}) × Q_{AD}

Note that spreading ULLS specific costs over all ADSL lines could completely eliminate the deadweight loss in a market for retail ADSL services, but not in the market for retail lines.

Distributing the ULLS-specific costs over all ADSL lines is clearly preferable to distributing them over only ULL services, as it results in greater reduction of deadweight loss at no additional cost.

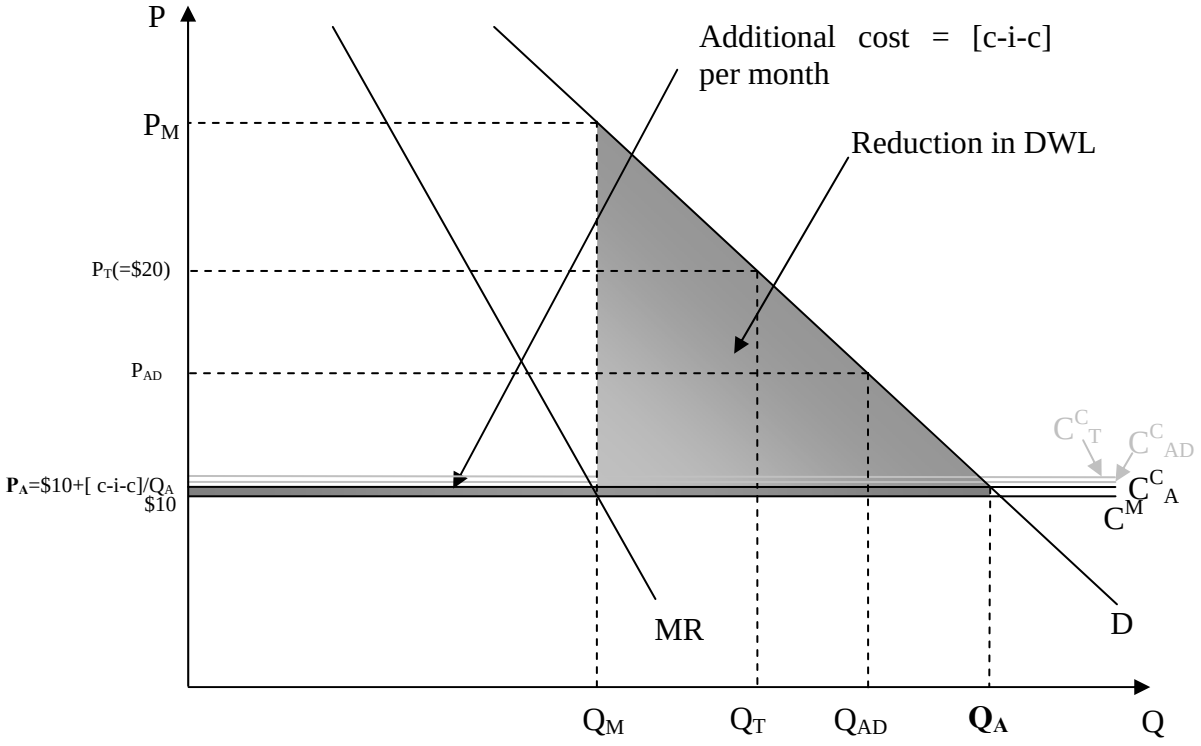
Figure F.3.6. Retail market with ULLS-specific costs distributed over all ADSL lines



Averaging ULLS-specific costs over all ADSL lines

Finally, distributing ULLS-specific costs over all retail lines results in the following outcome in the retail market:

Figure F.3.7. Retail market with ULLS-specific costs distributed over all lines



There is an even further reduction of deadweight loss is illustrated in Figure F.3.7 by the area between Q_{AD} and Q_A of the "reduction in deadweight loss". The additional reduction of the deadweight loss over Telstra's proposal is illustrated in Figure F.3.7 by the area between Q_T and Q_{AD} of the "reduction in deadweight loss". The retail price falls to

$P_A = C^C_A = \$10 + \mathbf{[c\text{-}i\text{-}c]}/ Q_A$

and the super normal profit falls to zero.

Distributing the ULLS-specific costs over all lines is preferable to distributing them over only ULL services or over all ADSL lines when considering the retail market for lines, as it results in greater reduction of deadweight loss at no additional cost. In fact, only under this mechanism could the deadweight loss be fully eliminated.

F.3.2. Tax/subsidy argument

Telstra's arguments

Telstra claims that:

> The Commission's tax/subsidy scheme is likely to impose a large cost on society.[196]

and then continues to expand on this argument. However, it is incorrect to represent the ACCC's preferred method of distributing ULLS and LSS specific costs as a tax-subsidy arrangement. A further explanation of this is outlined below (in ACCC's response to the Sidak report).

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[196] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, Annexure B, p. 9.

Telstra first argues that:

> … to the extent that Telstra must tax other (non-access) services to fund the Commission's tax/subsidy scheme, this will impose a deadweight loss …[197]

Telstra claims that this is additional to the deadweight loss illustrated as P1 in Figure F.3.3 above. However, Telstra does not state what that deadweight loss is, or where it arises. Setting aside the misrepresentation of the ACCC's approach as a tax-subsidy arrangement, ACCC's analysis in section F.3.1 clearly shows that its preferred method of ULLS and LSS cost recovery will result in a significant reduction of the deadweight loss over the method proposed by Telstra.

Next, Telstra states that:

> …the ULLS subsidy will mostly be to the benefit of inframarginal access seekers (that is, access seekers that would have purchased ULLS regardless of the subsidy). It is generally inefficient to subsidise inframarginal supply as would result form the Commission's Draft Decision. [reference omitted] Subsidising the profits earned by access seekers in supplying services over ULLS and LSS will not benefit end users. Rather, the subsidy will likely flow through into dividends and, in some cases at least, into dividends of foreign owners. Indeed, perhaps the single largest beneficiaries of the ULLS are ULLS access seekers.[198]

The ACCC's preferred method to ULLS-specific cost recovery does not subsidise profits earned by access seekers. Pooling all costs relevant to delivery of lines, as suggested by the ACCC, provides a competitively neutral and equivalent input into producing downstream services. This allows for competition between providers of retail services, which in turn reduces prices, reduces producers' supernormal margins, increases consumer surplus, and reduces the deadweight loss. This does not benefit access seekers, but rather it benefits end users of telecommunications services.

With regard to access seekers' profitability, Telstra notes that:

> A recent Optus briefing to investors in Singapore claims that Optus' gross margin from DSL and voice services supplied over ULLS will improve from 33.3% to 70.8% by migrating bundled voice and DSL customers from resale services to its ULLS network, based on a ULLS undertaking price of $44 per month. [reference omitted][199]

What Telstra fails to mention is the reason for this margin improvement, which is the elimination of Telstra's double charging for costs of line provision; once through a DSL wholesale charge, and once through a basic access charge. This double charging was illustrated by Telstra's comments reported in the media:

> Telstra's finance chief John Stanhope made a very telling comment at a recent investment bankers' conference. The advent of high-speed internet services using DSL over copper wires was the very best thing that could have happened to Telstra, he said. This is because it allows Telstra to pay for its national copper and fibre network a second time. A double dip on returns on capital. Nothing could make a CFO's heart sing louder, Stanhope mused.[200]

Further, Telstra neglects to note that as it and other access seekers have same input costs, any immediate increase in margins can be competed away. Telstra, as a price

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[197] *Ibid*., p. 10.

[198] *Ibid.*

[199] *Ibid*.

[200] M. Sainsbury, 'Coonan's out of the loop on separation', *The Australian*, 23 June 2005, p. 27.

leader in both DSL and voice markets, effectively has significant influence over these margins.

Third, Telstra claims that:

> … reducing ULLS prices by the amount suggested by the Commission (**[c-i-c]**) will seriously threaten Telstra's ability to recover its own fixed costs. Telstra notes that if ULLS access seekers' costs are subsidised by **[c-i-c]** per month, and this subsidy is carried through to retail prices, Telstra could lose up to **[c-i-c]** over the two-year undertaking period in contributions to fixed costs. [reference omitted] Telstra submits that the Commission does not take into account Telstra's legitimate business interests in reaching its conclusion on what it considers to be a reasonable method for the recovery of access specific cots as required by the statutory criteria set out in the TPA.[201]

This claim summarises the errors in Telstra's analysis. The reduction of ULLS prices claimed by Telstra refers to the difference between its and ACCC's preferred views over the recovery of ULLS-specific costs. As noted earlier, these costs amount to less than **[c-i-c]** over five years. However, Telstra claims that due to a different method of recovery of these costs, it will not be able to recover over **80 times** that amount over the next two years.

Telstra characterises this as a loss of ability to recover its own fixed costs. This is not the case. As illustrated in section F.3.1, any loss due to ACCC's preferred approach to ULLS pricing that Telstra may face is a loss in supernormal profits not an under-recovery of costs. **Under ACCC's preferred approach, all of Telstra's costs of providing ULLS are recovered, together with a return on the investment**. Supernormal profits are **not** required to address Telstra's "legitimate business interests" and as such, their recovery is not reasonable under regulatory criteria outlined in the *Trade Practices Act 1974*.

Finally, Telstra states that:

> … there will be dynamic efficiency costs associated with the Commission subsidising one technology (ULLS) and taxing others (non-ULLS).[202]

Again, ACCC's preferred method does not subsidise ULLS, but rather ensures a competitively neutral access to lines by either Telstra or access seekers. Further, the ACCC is curious as to what other substitute (non-ULLS) technology Telstra believes is being taxed to provide the claimed ULLS subsidy, in terms of these fixed lines.

Sidak's 'Externality' and the Consequent Tax-Subsidy Arrangement

The following is an assessment of an expert report of Gregory Sidak, submitted by Telstra.[203] The ACCC notes that its assessment is broadly supported by Optus.[204]

Sidak's entire argument appears to be based on a misconception of the ACCC's draft report being related to addressing an 'externality'. The ACCC argues that ULLS will ultimately or potentially result in all prices being driven down for all market participants as part of a competitive process. However, if this does occur it is clearly not an externality, and the ACCC neither uses the term 'externality' anywhere in its

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[201] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, Annexure B, p. 10.

[202] *Ibid.*, p. 11.

[203] G. Sidak , *Expert Report of J. Gregory Sidak*, 22 September 2005.

[204] Optus, *Telstra's ULLS Undertaking*, 9 December 2005.

draft and nor does it refer to this concept implicitly. Nonetheless, Sidak claims at several places (paragraphs 29, 36, 43, 45, 47, 53 and 60) that the ACCC asserts a large positive externality from ULLS, and bases all of his following arguments on this claim.

Sidak's view apparently stems partly from his definition of 'externality' in paragraph 11 which is referenced to the Palgrave Dictionary at page 263. However, Sidak only reproduces part of the Palgrave definition, omitting the defining element of an externality:

> By indirect, we mean that the effect concerns an agent other than the one exerting this economic activity and that this effect does not work through the price system.[205]

The effect that the ACCC refers to clearly involves an agent exerting this economic activity through operation of the price system, and cannot sensibly be depicted as an 'externality'.

Sidak then places a similarly misleading construction on the ACCC's usage of the word 'option'. The ACCC uses the term 'option' to describe that ULLS provides an 'alternative' or 'option' to subscribing directly to Telstra. The word 'option' is used in its normal dictionary sense. However, Sidak, describes this as 'the ACCC's crude application of option theory' (paragraph 36) and represents it in terms of an 'option value' as analysed with respect to externalities from new subscribers. This meaning cannot reasonably be drawn either explicitly or implicitly from the ACCC's draft report, which makes no reference to 'option demand'.

Sidak depicts the ACCC's approach of spreading ULLS-specific costs more widely as one of 'taxing' Telstra's customers (e.g., paragraphs 49 and 53). For example, at 49 he depicts the ACCC's approach thus:

> … the ACCC's plan resembles a legislative choice concerning taxation and appropriation. It creates an off-budget funding source. This … gives fresh meaning to Judge Richard Posner's famous term "taxation by regulation".

Even more bluntly at paragraph 32, the ACCC's approach is presented as:

> regulation [that] compels Telstra to raise its prices.

For this to be an accurate depiction, the 'taxation' would have to involve the ACCC somehow *mandating* that Telstra's customers pay some sort of surcharge on their lines. How could this be possible when – as Sidak observes – these services are 'unregulated'? Further, compulsion is not inherent in any of the ACCC's wording regarding broader cost allocation.

Having referred to 'taxation by regulation', an 'off-budget funding source', etc., Sidak is curiously undecided about whether Telstra has the ability to increase the prices of lines to its own customers or not. Intermittently it apparently can and will increase its line prices (see paragraphs 20, 23, 25 and 50) while at others it cannot and will not increase its line prices (see paragraphs 48 and 49). So while at paragraph 20 Sidak claims that:

> [t]his cost allocation policy would directly result in increased prices paid by the end-user … [it] would raise prices for Telstra customers

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[205] J. Eatwell, M. Milgate and P. Newman (eds), *The New Plagrave Dictionary of Economics*, Macmillan, London, Volume 11, P. 263.

at 48 he empathically states the opposite:

> The regulator's recommendation … will be as useless as the broom with which King Canute tried to sweep back the tide. The entry subsidy … will be paid by Telstra itself.

This indecision substantially weakens Sidak's case, irrespective of which way it goes. In particular, to the extent it is implied that Telstra does have the ability to increase its own line prices even in the face of ULLS competition, the ACCC's position is substantially strengthened by this admission of its market power. It also undermines Telstra's estimates of large revenue losses from ULLS.

It would appear to be crucial to the effect of the ACCC's approach to determine whether any price reduction is passed through to final consumers. Were it not passed through, there would not be an issue as Telstra would neither lose any additional lines nor have to reduce its own prices. However, again the report is unclear on this crucial issue, with comments either way, but – as in 36 – leaning towards the absence of pass-through:

> … the empirical evidence to date indicates that access seekers have not passed on any savings to their customers.

This is reinforced at 60:

> … access seekers do not pass on savings to their customers, and thereby do not impose a constraint on the pricing of incumbent operators.

This is important– to the extent there is a subsidy, according to Sidak it will not have any impact on Telstra's own pricing or – it must be assumed – on ULLS take-up.

Sidak's statement is at odds with public statements made by senior Telstra representatives. For example, Telstra's Chief Financial Officer, John Stanhope estimates economic impacts of ULLS regulation with the following assumption:

> 50% of the lower competitor access price are assumed to flow through to retail pricing and is assumed to impact over a 5yr period[206]

On the other hand, Telstra's Group Managing Director, Public Policy and Communications, Phil Burgess uses some 'simple mathematics' to estimate the revenue loss from the ACCC's ULLS decision:

> The ACCC is proposing to reduce the access price from $22 to $13 a month, a $9 reduction. Nine times 7.5 million, times 12 months a year, gives you about $810 million.[207]

This calculation assumes 100 per cent pass-through into Telstra's prices. Therefore, views of senior Telstra executives appear to be totally contrary to Sidak's conclusion of zero pass-through.

Further Issues with the Sidak Statement

'Subsidy' and 'Cross-Subsidy' Definitions

Since at least Faulhaber thirty years ago, a 'subsidy' involves pricing below long-run incremental cost. Sidak can only construct or imagine a 'subsidy' by defining the ULLS-specific costs as an 'incremental cost', a position that the ACCC does not

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[206] J. Stanhope, *Telstra Regulatory Briefing*, 1 December 2005,

[207] See G. Barker, 'Sol's Man Pleads for Lighter Touch', *The Sydney Morning Herald*, 4 November 2005.

accept because of its view that these are part of the common costs over all DSL lines. Further, at no point does he qualify 'incremental cost' with 'long-run' as required by Faulhaber's definition.

Bringing together the 'taxation' and 'subsidy' sides of Sidak's argument, there is considerable confusion about the notion of 'cross-subsidy'. Sidak (24) defines cross-subsidy in this way:

> Cross-subsidy in a regulatory context typically involves misallocation or shifting of costs from an unregulated, competitive service (for which returns are uncertain) to a regulated service subject to rate-of-return regulation (for which returns are regulated).

Comparison of this with the definition based on Faulhaber's work reveals that it is unrecognisable. For example, the idea of cross-subsidy does not involve 'misallocation or shifting of costs', 'uncertainty' of returns in a competitive sector is not a feature of the standard definition, and rate-of-return regulation is not a feature of the Australian regulatory context.

Following presentation of his own definition, Sidak sets out his own rendition of Faulhaber only to follow this by a statement that the break-even assumption does not apply:

> When applied to a non-regulated service, that assumption is violated (revenues may exceed economic costs), and only the incremental cost test is relevant.

That is, if there is a subsidy there may be no need to vary other prices in order to fund it. This is inconsistent with Sidak's earlier claims, noted above.

Sidak's lack of perspective is further evidenced by repeated claims that the subsidy involved in the ACCC's pricing is 'massive' (10, 44 and 60). 'Massive' is a relative term, but it is hard to see how he could regard the paltry amount – of $20 million or so – that is being more broadly allocated by the ACCC's proposal as 'massive'.

The Mobile Termination Access Service (MTAS) Analogy

Sidak labours with an analogy with the ACCC's June 2004 MTAS Report, claiming an inconsistency between the ACCC's approach between ULLS and MTAS. In the MTAS report a network externality is examined and it is concluded that it does not provide a justification for a 'tax' on termination in order to subsidise subscription. Sidak argues that in ULLS the ACCC does not adopt the same approach.

Fundamentally, the relevance of the comparison is negligible – the ACCC is not relying on an externality argument with respect to ULLS. However, putting aside this irrelevance, Sidak reveals a misunderstanding of the ACCC's MTAS approach. For example, at 44 he states:

> The existence of positive externalities in mobile communications might justify mobile termination rates that are set by regulation below incremental costs. … In that instance, the ACCC recognized that market-determined prices would reflect the marginal social benefit in the absence of a positive externality.

In contrast, the ACCC was assessing whether the externality could justify termination charges above cost, and argued that market determined termination charges are unjustifiably high. It is not entirely clear, but Sidak may have in mind the US receiving party pays (RPP) pricing of termination in making such odd statements regarding mobile termination.

Misrepresentation of Marginal Cost Pricing

The discussion of economic efficiency and competitive outcomes over paragraphs 13 to 15 includes the tying of 'marginal cost pricing' with the 'maximization of society's welfare' (14). At 13 it is suggested that:

> [t]he marginal cost pricing rule states that price is set according to the demand curve at a level of production where marginal cost equals marginal revenue.

This is clearly incorrect by construction because marginal cost is being set equal to marginal revenue, not price. Where the demand curve slopes downwards (Sidak considers pricing including under imperfect competition) and marginal revenue is therefore below price, this rule will result in a price *above* marginal cost, consistent with monopolistic behaviour and an inefficient outcome.

F.3.3. Normal competitive practice argument

Telstra claims that:

> Perhaps the most telling indicator of the (lack of) merit of the Commission's preferred cost recovery approach is whether similar pricing mechanisms exist in similar but competitive markets[208]

Telstra then compares the provision of lines to itself or access seekers (though the ULLS), to production by the Ford Motor Company of Laser hatchbacks and Jaguar luxury cars, claiming "Laser-specific" costs would not be partly recovered through pricing of Jaguars. This is a somewhat curious, but ultimately misguided, analogy. Lasers and Jaguars are two different products sold in different markets. They are **NOT** substitutes. On the other hand, retail lines supplied by Telstra and those supplied by access seekers through ULLS **ARE** substitutes. Lasers and Jaguars are not in competition with each other where retail lines of Telstra and access seekers are. Therefore, while "Laser-specific" costs cannot be recovered from Jaguars, ULLS-specific costs can be recovered from all lines.

Telstra's second analogy is even more absurd. It suggest that recovering ULLS-specific costs over all lines is like Woolworths purchasing land next to its store and practically giving it away to Coles so that it can compete with it. Telstra is not required to roll-out another copper network parallel to its own and make it available to access seekers at next to no cost! If Telstra wishes to deal in analogies, perhaps a more accurate one would be Woolworths using some of its shelves to stock brand name canned tomatoes on shelves next to its own Home Brand canned tomatoes – which it does – and recovering the total cost of shelving these items equally across both products. This is akin to recovering the total cost of lines – Telstra's own or ULLS – equally over all retail products – Telstra's and access seekers'.

This analogy shows that the ACCC's preferred approach to recovering ULLS-specific costs does have precedence in other competitive markets.

The ACCC is particularly concerned about inconsistencies in Telstra's approach to the recovery of these costs. In the draft decision regarding ULLS and LSS connection charges, the ACCC found that the costs of Telstra's IDS system are incorporated into the PIE II model. Accordingly, all ULLS purchasers contribute to the costs of Telstra's IDS system through their monthly charges, in addition to Telstra's claimed

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[208] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, p. 13.

'up-front' charge for what Telstra believes to be their 'incremental' costs. The net result is that access seekers contribute to Telstra's allocated share of the IDS costs, but Telstra does not contribute to theirs.

Telstra's argument is therefore inconsistent, in that it seems to consider that it is appropriate for access seekers to contribute to its share of IDS costs through the monthly charge mechanism, but it considers that a similar approach to ULLS specific costs – where the distribution would occur in the other direction – is inappropriate.

In addition, it is highly likely that Telstra's claimed 'internal' ordering and provisioning costs, equivalent to ULLS specific costs and first raised in its submission in response to the draft decision, are recovered in the same fashion to IDS costs. That is, Telstra states that the ACCC has not taken into account its own internal ordering and provisioning systems through the TIS and the TTIP. However, at no point in Telstra's submission does it discuss how these costs are ordinarily recovered, other than to state that they are "not costs associated with retail ordering and provisioning"[209].

The ACCC considers that there is no reason to believe that these costs are not incorporated into the PIE II model through Telstra's claims for O&M mark-ups on its network assets. As a result, all users of the network, either Telstra retail or access seekers, will contribute to the recovery of the costs of Telstra's system, including ULLS-based access seekers. Accordingly, Telstra's claims that it is not appropriate to distribute the costs of the ULLS-specific system on a similar basis to the way in which it distributes its own costs is considered to be highly inappropriate. Where Telstra distributes its costs in this fashion, the ACCC considers that ULLS-specific costs should be similarly distributed. This can, of course, be accomplished by standardising the treatment of both sets of costs through incorporation into Telstra's O&M mark-ups within the PIE II model, rather than the sole incorporation of Telstra's costs.

F.3.4. Telstra's claimed corresponding costs

Telstra has indicated that the ACCC has incorrectly characterised Telstra's costs. In particular, Telstra claims that it incurs costs as a result of provisioning network services for its retail services. These relate to Telstra's "STS interface" costs which are, according to Telstra, comparable but different from the ULLCIS interface, which is used when ULLS access seekers order and provision ULL services.

The ACCC accepts that if Telstra faces corresponding costs that are not recovered elsewhere, these need to be added to the pool of costs to be distributed over all lines to ensure cost recovery. In this case, Telstra's own costs of provisioning network services to its retail services should be combined with the ULLS-specific (and LSS-specific) costs and distributed over all lines. However, Telstra has not attempted to justify or quantify these costs.

First, while Telstra asserts that these costs exist, it does not explain why they are not already recovered as part of network costs. If any addition to the cost pool of ULLS and LSS-specific costs is to be made for similar costs faced by Telstra, Telstra should

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[209] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, Annexure B, p. 14.

have demonstrated to the ACCC, that these costs exist and are not recovered as part of network cost (and are not included in the PIE II model).

Second, while Telstra asserts that these costs exist, it does not quantify them. If Telstra believes that the ACCC's preferred approach is deficient because it does not account for these costs, it should have quantified them so that they can be combined with ULLS and LSS-specific costs and distributed over all lines. If the resulting per line monthly charge, when combined with network charges, amounted to Telstra's proposed undertaking charges, the ACCC would be less likely to have concerns over competitive neutrality and efficiency of Telstra's proposed charges.

However, in order for Telstra's charges to be considered reasonable, Telstra would need to justify approximately $1 billion per annum in "STS interface" costs (this can be calculated as $10 per month x 12 months x 10 million customers).[210] The ACCC notes that annual ULLS-specific costs are about 0.5 per cent of this, and as indicated previously, they are largely fixed with respect to demand for lines. Therefore, even if Telstra could demonstrate $1 billion of unrecovered "STS interface" costs to the ACCC, it is not likely that these costs would be found to be efficient.

Telstra has not provided sufficient information to the ACCC to convince it that its characterisation of Telstra's and access seekers' costs is incorrect. Further, Telstra has not demonstrated that any "corrected" characterisation of costs would yield an outcome where Telstra's undertakings could be accepted as reasonable.

Finally, with regard to ULLS-specific costs, and its own provisioning costs, Telstra states that:

> If access seekers are equally efficient at ordering and provisioning ULLS from Telstra Wholesale as Telstra Retail is at ordering and provisioning network services from TIS and TTIP then, all other cost elements being equal, there is no reason for the Commission to conclude that Telstra's average costs are below those of access seekers.
>
> However, even if Telstra's average cost of network service ordering and provisioning were below access seekers' average contribution to ULLS specific cost, it would be because Telstra's internal supply was more efficient than supply to access seekers.[211]

Telstra, however, should note that it is not access seeker's efficiency that is in question. It is Telstra who chose the method of ordering and provisioning services to itself, and it is Telstra who chose the method of ordering and provisioning services to access seekers. Therefore, it is not access seeker's efficiency that is in question, but rather, the relativities of Telstra's own efficiency of supplying services to itself or access seekers.

Telstra further claims that:

> …the Commission's claim implies that entry through ULLS is inefficient in a productive sense. That is, ULLS entry requires more resources than direct supply. If this is the case, then it is in the interest of economic efficiency to dissuade access seekers from

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[210] $10 per month is approximately the amount of ULLS-specific costs distributed over ULLS lines. If the pool of costs distributed over all lines was to be $10 per month, then since ULLS-specific costs distributed over ULL services gives $10 per month, Telstra's "STS interface" costs spread over all Telstra's lines would need to be $10 per month.

[211] Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charge Undertakings*, 23 September 2005, Annexure B, p. 16.

> purchasing ULLS and to provide incentives for them to build their own competitive infrastructure.[212]

While it may be true that additional costs need to be incurred in order to provide ULLS, these are outweighed by the reduction in the deadweight loss caused by Telstra pricing (see analysis above). To argue otherwise is to argue that the declaration of the ULLS is inefficient. The additional costs will be incurred regardless of whether Telstra's or ACCC's preferred method of cost recovery is used. However, as indicated above, Telstra's proposed method is inefficient. While ACCC's preferred method eliminates more (all) deadweight loss than Telstra's, it does not result in any more cost than Telstra's.

F.3.5. Appropriate demand estimates

When combined with appropriate network cost estimates, recovering ULLS and LSS specific costs from lines that have ever been taken as ULLS or LSS, suggests Telstra's proposed prices are unreasonable, even if costs are re-distributed over 6 years (see Appendix A).

Finally, the ACCC notes that Telstra has supplied actual ULLS numbers for 2004-05. These cannot be considered by the ACCC as they are ex-post figures and as such would undermine an ex-ante analysis used to previously assess these charges.

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[212] *Ibid.*, pp. 16-17.

Appendix G. Section 152CGA Specification of Documents

For the purposes of section 152CGA, the documents that the Commission examined in the course of making its decision are specified in this section.

Below is a list of submissions that have been submitted to the ACCC and were examined by the ACCC as part of this undertaking assessment.[213].

Many of these submissions have confidential content according to the following key:

- **(1)** confidentiality claim made over entire submission
- **(2)** confidentiality claim made over parts of submission
- **(3)** no confidentiality claim made

Submissions marked (*) relate largely to connection and disconnection charges.

G.1. Telstra submissions in support of the undertakings

Confidential versions of these submissions were received by the ACCC on 7 February 2005. Public versions were not received until 2 March 2005.

Telstra, *Telstra's submission in support of the ULLS monthly charges undertaking dated 13 December 2004*, February 2005. **(2)**

NECG, *Appendix 1 to Annexure D of Telstra's submission in support of the ULLS monthly charges undertaking*, November 2004. **(2)**

NECG, *Appendix 1 to Annexure L of Telstra's submission in support of the ULLS monthly charges undertaking*, November 2004. **(2)**

Telstra, *Telstra's submission in support of the ULLS connection charges undertaking dated 13 December 2004*, February 2005. **(2) (*)**

Telstra, *Telstra's submission in support of the SSS monthly charges undertaking dated 13 December 2004*, February 2005. **(2)**

Telstra, *Telstra's submission in support of the SSS connection and disconnection charges undertaking dated 13 December 2004*, February 2005. **(2) (*)**

G.2. Submissions in response to the ACCC's discussion papers

The following submissions were received in response to the ACCC's discussion paper which was released on 9 March 2005.

G.2.1. AAPT

AAPT, *Submission by AAPT Limited to the Australian Competition and Consumer Commission in response to* Telstra's undertakings for the unconditioned local loop service *&* Telstra's undertakings for the line sharing service *discussion papers, March 2005,* May 2005. **(3)**

[213] These submissions may refer to other submissions to earlier core services undertaking assessments or model price determinations. These may not necessarily be listed here, but please note that public versions are likely to be available on the ACCC's website.

G.2.2. Competitive Carriers Coalition

Gibson Quai–AAS, *Competitive Carriers Coalition Response to the ACCC Discussion Papers on ULLS and LSS Undertakings*, May 2005. **(2)**

G.2.3. Macquarie Telecom

Macquarie Telecom, *Macquarie Telecom's Response to Telstra's Undertakings on the Unconditioned Local Loop Service*, 1 June 2005. **(2)**

G.2.4. Optus

Optus, *Optus submission to the Australian Competition and Consumer Commission on Telstra's ULLS undertakings*, May 2005. **(2)**

G.2.5. Telstra

Axiom Forensics, *Telstra Corporation Ltd Report on Appropriateness of Demand Assumptions*, 15 April 2005. **(2)**

R. Bowman, *Report on WACC for ULLS and LSS*, 26 May 2005. **(2)**

M. Kennet and B.M. Mitchell, *Commentary on PIE II model assumptions*, CRA International, May 2005. **(1)**

H. Ergas, *Expert report on access deficit*, CRA International, May 2005. **(2)**

H. Ergas, *Expert report on recovery of ULLS-specific costs*, CRA International, May 2005. **(2)**

H. Ergas, *Expert report on ULLS and SSS prices—IEN costs*, CRA International, May 2005. **(2)**

H. Ergas, *Expert report on ULLS and SSS specific cost models—levelisation*, CRA International, May 2005. **(2)**

Telstra, *Telstra's submission in response to the Australian Competition and Consumer Commission's discussion paper in respect of ULLS received March 2005*, 27 May 2005. **(2)**

Telstra, *Telstra's supplementary submission in support of the ULLS connection charges undertaking dated 13 December 2004*, 7 July 2005. **(2) (*)**

Telstra, *Telstra's submission in response to the Australian Competition and Consumer Commission's discussion paper in respect of SSS dated March 2005*, 27 May 2005. **(2)**

Telstra, *Telstra's supplementary submission in support of the SSS connection and disconnection charges undertaking dated 13 December 2004*, 7 July 2005. **(2) (*)**

[c-i-c], *Statement of **[c-i-c]***, 26 May 2005. **(2)**

[c-i-], *Statement of **[c-i-c]***, 25 May 2005. **(2) (*)**

[c-i-c], *Statement of **[c-i-c]***, 26 May 2005. **(2) (*)**

[c-i-c], *Statement of **[c-i-c]***, 25 May 2005. **(1) (*)**

[c-i-c], *Statement of **[c-i-c]***, 7 July 2005. **(2) (*)**

[c-i-c], *Statement of **[c-i-c]***, 26 May 2005. **(2)**

[c-i-c], *Statement of **[c-i-c]***, 26 May 2005. **(2)**

[c-i-c], *Statement of **[c-i-c]***, 25 May 2005. **(2)**

[c-i-c], *Statement of **[c-i-c]***, 27 May 2005. **(2) (*)**

[c-i-c], *Supplementary statement of **[c-i-c]***, 6 July 2005. **(2) (*)**

[c-i-c], *Statement of **[c-i-c]***, 30 May 2005. **(2) (*)**

G.3. Submissions in response to the ACCC's Draft Decision

The following submissions were received in response to the ACCC's Draft Decision which was released on 10 August 2005.

G.3.1. Competitive Carriers Coalition

Competitive Carriers Coalition, *Submission to the ACCC Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings*, August 2005. **(3)**

G.3.2. Macquarie Telecom

Macquarie Telecom, *Macquarie telecom – Response to Draft Decision on Telstra's ULLS and LSS Monthly Charges*, 12 September 2005. **(3)**

G.3.3. Optus

Optus, *Telstra's ULLS Monthly Charge Undertaking*, 29 August 2005. **(3)**

Optus, *Telstra's ULLS Undertaking*, 9 December 2005. **(2)**

G.3.4. Telstra

R.G. Bowman, *Confidential Report on WACC in Response to ACCC Draft Decision on ULLS and SSS, Prepared for Telstra Corporation Limited*, September 2005. **(2)**

R.G. Bowman, *Public Report on WACCin Response to ACCC Draft Decision on ULLS and SSS - Prepared for Telstra Corporation Limited*, September 2005.

B.M. Mitchell, *Commentary on Network Costs Section of ACCC Draft Decision*, 29 September 2005. **(2)**

G. Sidak, *Expert report of J. Gregory Sidak*, 22 September 2005. **(3)**

H. Ergas, *Response to inaccurate citations by the ACCC of previous expert reports by Henry Ergas*, CRA International, September 2005. **(2)**

Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings, Annexure A, Background*, 23, September 2005. **(3)**

Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings, Annexure B, ULLS and LSS Specific Costs*, 23 September 2005. **(2)**

Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings, Annexure D, Network Costs*, 23 September 2005. **(2)**

Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Draft on Telstra's ULLS and LSS Monthly Charges Undertakings, Annexure F, Response to Access Seekers Submissions*, 10 October 2005. **(2)**

Telstra, *Telstra's Confidential Submission in Response to the Australian Competition and Consumer Commission's Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings, Annexure G, Previous Submissions*, 23 September 2005. **(2)**

Telstra, *Telstra's Response to the ACCC's Draft Decision on Telstra's ULLS and LSS Monthly Charges Undertakings*, 23 September 2005. **(3)**

[c-i-c] *Second Statement of **[c-i-c]***, 20 September 2005. **(2)**

[c-i-c] *Statement of **[c-i-c]*** 29 September 2005. **(2)**

[c-i-c] *Statement of **[c-i-c]*** 29 September 2005. **(2)**

[c-i-c] *Second Statement of **[c-i-c]***, 23 September 2005. **(2)**

G.4. Additional information examined by the ACCC

The following is the list of additional information examined by the ACCC in reaching the final decision on Telstra's ULLS and LSS monthly charge undertakings:[214]

- Telstra's 13 December 2004 ULLS and LSS monthly charges undertakings and their supporting submissions
- the ACCC's Draft Decision on Telstra's 13 December 2004 ULLS and LSS monthly charges undertakings
- the ACCC's Final Determination of model price terms and conditions for the PSTN, ULLS and LCS services
- the ACCC's Final Decision on Assessment of Telstra's undertakings for PSTN, ULLS and LCS
- the ACCC's Draft Decision on Assessment of Telstra's undertakings for PSTN, ULLS and LCS
- the ACCC's Final Decision on Telstra's 1 September 2003 LSS undertaking
- all submissions and other material referred to in above-mentioned papers

The following is a list of information directly referred to in this report (and the ACCC's draft decision):

AAPT, *Submission by AAPT Limited to the Australian Competition and Consumer Commission in Response to Telstra's Unconditioned Local Loop Service and Telstra's Undertakings of the Line Sharing Service Discussion Papers, March 2005*, May 2005, p.5.

ABN Amro, *Telecommunications Services*, 12 October 2005, Table 6, p.26.

ACCC, *A Final Report on the Assessment of Telstra's Undertaking of the Line Sharing Service*, August 2004, pp. 30-33.

ACCC, *A Report on the Assessment of Telstra's Undertaking for the Domestic PSTN Originating and Terminating Access Services*, July 2000.

ACCC, *Assessment of Telstra's Undertaking for PSTN, ULLS and LCS - Final Decision*, December 2004.

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[214] This may not necessarily be a complete list of information provided to the ACCC or information referred to by the ACCC. Other information may be referred to in the body of the decision itself.

ACCC, *Assessment of Telstra's Undertaking for PSTN, ULLS and LCS - Draft Decision*, October 2004.

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ACCC, *Collection and Use of Information*, 2000.

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ACCC, *Final Decision on Telstra's 1 September 2003 LSS Undertaking*.

ACCC, *Final Determinations for Model Price Terms and Conditions for the PSTN, ULLS and LCS Services*, October 2003.

ACCC, *Line Sharing Service - Final Decision on Whether or not a Line Sharing Service Should be Declared Under Part XIC of the Trade Practices Act 1974*, August 2002.

ACCC, *Telecommunications Services - Declaration Provision: a Guide to the Declaration Provision of Part XIC of the TPA*, July 1999, pp.32-33.

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R.G. Bowman, *Confidential Report on WACC for ULLS and LSS - Prepared for Telstra*, 26 May 2005.

R.G. Bowman, *Report on WACC for ULLS and LSS (public version) - Prepared for Telstra*, 26 May 2005.

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H. Ergas, *Expert Report on the Recovery of ULLS Specific Costs*, CRA International, May 2005.

H. Ergas, *Expert Report on ULLS and SSS Specific Cost Models - Levelisation*, CRA International May 2005.

H. Ergas, *Confidential Commentary on PIE II Model Assumptions (Public Version)*, CRA International, May 2005.

H. Ergas, *Expert Report on Recovery of ULLS-Specific Costs (Public Version)*, CRA International, May 2005.

H. Ergas, *Confidential Expert Report on ULLS and SSS Prices - IEN costs*, CRA International, May 2005.

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