



Telstra's Undertaking for the Line Sharing Service

Discussion Paper

December 2003

1 Introduction

Telstra Corporation Limited (“Telstra”) lodged an access undertaking (“the undertaking”) under Division 5 of Part XIC of the *Trade Practices Act 1974* (“the Act”) with the Australian Competition and Consumer Commission (“the Commission”) on 1 September 2003. Part XIC of the Act establishes a regime for governing access to certain services in the telecommunications industry. Under Part XIC, providers of an active declared service (access providers) have an obligation to supply that service. The undertaking specifies certain terms and conditions upon which Telstra undertakes to meet its standard access obligations (“SAOs”) to supply the Line Sharing Service (“LSS”), which is a declared 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,¹ 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 is normally split (or shared) in a spectral sense so that one carrier or service provider provides the voice services over the line in question, while another carrier provides high-speed data services through the use of its own xDSL technology. This is the concept of line sharing and is also sometimes referred to as spectral unbundling or spectrum sharing.

Line sharing is, however, subtly distinct from a LSS which involves 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.

The LSS was declared on 7 October 2002 following the Commission’s decision that declaration would be in the long-term interests of end-users. Although Telstra had negotiated commercial outcomes with some access seekers at the time of declaration, the Commission considered that the underlying structure of the market was such that Telstra had (and continues to have) the ability and incentives to deny access or set unreasonable terms and conditions. In this regard, Telstra is the sole provider of the LSS and no other services are considered to be able to exert a sufficient competitive constraint on its supply.

In making its decision the Commission noted that declaration had the potential to preserve competition in downstream markets for high-speed data services and that while it was

¹ 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.

unlikely to improve competition for the provision of voice telephony services it would not dampen such competition.

At the time of declaring the LSS, the Commission detailed the pricing principles that should be applied to this service. In particular, it was considered that an access price should enable the recovery of LSS-specific costs and some allocation of the costs of a line over which the LSS is provided (see section 3.3 below).

The terms and conditions specified in the Telstra's undertaking of 1 September 2003 primarily relate to the pricing of the LSS and not to other matters of supply.

The undertakings include:

- service descriptions; and
- a price list specifying Telstra's proposed charges for the service specified in the service description.

Specifically, the undertakings provide that the monthly rental charge applicable to the LSS will be \$15 per service in operation per month² and are to continue until the earlier of 31 December 2004 or their termination.

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

To this end, the purpose of this discussion paper is to:

- inform parties of the matters the Commission must take into consideration in making the decision to accept or reject an undertaking;
- specify a number of issues the Commission would particularly like addressed in submissions; and
- outline the process the Commission will follow in assessing the undertakings.

The Commission will consider all industry submissions in deciding whether to accept or reject the undertakings. The Commission seeks submissions on the undertaking, and the issues raised in the discussion paper, by **no later than 5 weeks** from the date upon which Telstra makes relevant information reasonably available for industry assessment, this being information that is contained in Telstra's confidential materials in support of its undertakings. In particular, this includes information on the cost model being used by Telstra to determine the costs of the LSS. Interested parties wishing to obtain access to confidential materials must notify Telstra by **10 December 2003**. If no parties notify interest in obtaining this information by this time, the 5 week deadline period will effectively begin from this date. The closing date for submissions will be notified on the Commission's website.

² Although Telstra notes the undertakings primarily relate to the pricing of the LSS, only the monthly rental charge falls within the scope of the undertakings and the connection and disconnection charges associated with the LSS are not included

The Commission considers that the process established by industry participants for obtaining access to confidential information in the course of the Telstra's 2003 Core Services Undertakings assessment process should again be used for negotiating terms upon which to access confidential materials. Parties wishing to obtain confidential information referred to in this paper should contact Patrick Jeffers of Telstra on (02) 9298 5594.

Please forward written submissions to:

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Any queries on this issues paper should be directed to Claire Preston, tel: 03 9290 1885 in the first instance.

The remainder of the paper is structured accordingly.

Chapter Two outlines the legislative criteria and process for the assessment of the undertaking.

Chapter Three outlines the key issues the Commission will consider in its assessment of reasonableness of the undertaking under its pricing principles as well as the matter of the service description applied to the LSS.

2 Legislative criteria for the assessment of undertakings

Under Part XIC of the Act, the Commission may declare carriage services and related services to be declared services. Carriers and carriage service providers who provide declared services are required to comply with the SAOs in relation to those services. The SAOs facilitate the supply of declared services by access providers to access seekers, in order that access seekers can provide carriage services and/or content services.

Section 152AY(2) of the Act (detailed below) specifies the way the terms and conditions upon which the access provider must comply with the SAOs are determined:

The carrier or carriage service provider must comply with the obligations:

- (a) on such terms and conditions as are agreed between the following parties:
 - (i) the carrier or carriage service provider, as the case requires;
 - (ii) the access seeker; or
- (b) failing agreement:
 - (i) if an access undertaking given by the carrier or carriage service provider is in operation and specifies terms and conditions about a particular matter – on such terms and conditions relating to that matter as are set out in the undertaking; or
 - (ii) if an access undertaking given by the carrier or carriage service provider is in operation, but the undertaking does not specify terms and conditions about a particular matter – on such terms and conditions relating to that matter as are determined by the Commission under Division 8 (which deals with arbitration of disputes about access); or
 - (iii) if there is no such undertaking – on such terms and conditions as are determined by the Commission under Division 8 (which deals with arbitration of disputes about access).

2.1 Legislative criteria

Section 152BV of the Act sets out the obligations of the Commission in assessing an undertaking.

- (1) This section applies if:
 - (a) an ordinary access undertaking is given to the Commission by a carrier or a carriage service provider; and
 - (b) the undertaking does not adopt a set of model terms and conditions set out in an approved telecommunications access code.
- (2) The Commission must not accept the undertaking unless:
 - (a) the Commission has:
 - (i) published the undertaking and invited people to make submissions to the Commission on the undertaking; and
 - (ii) considered any submissions that were received within the time limit specified by the Commission when it published the undertaking; and
 - (b) the Commission is satisfied that the undertaking is consistent with the standard access obligations that are applicable to the carrier or provider; and

- (c) if the undertaking deals with a price or a method of ascertaining a price – the Commission is satisfied that the undertaking is consistent with any Ministerial pricing determination; and
- (d) the Commission is satisfied that the terms and conditions specified in the undertaking are reasonable; and
- (e) the expiry time of the undertaking occurs within 3 years after the date on which the undertaking comes into operation.

Published the undertaking and invited people to make submissions

The Commission is publishing Telstra's undertakings and supporting statements to the undertakings on its website at the same time as this discussion paper and is now inviting parties to make submissions on the undertakings. These documents are available on the Commission's web site www.accc.gov.au. The Commission invites submissions on any aspect of the undertaking.

While the Commission will, as required, have regard for all submissions that are made to it on or before the closing date for submissions, the Commission strongly encourages all interested parties to make their submissions as soon as they are in a position to do so. In particular, the Commission requests that should a party intend to make a submission on any matter not addressed in this issues paper, it notify the Commission of its intentions as soon as possible.

The Commission also encourages parties to make their submissions in a way that facilitates the efficient assessment of its various contentions, including the verification of any facts or data upon which those contentions are based. In this regard, parties are encouraged to restrict confidentiality claims to a minimum and to establish appropriate confidentiality regimes for the disclosure of any information that is claimed to be confidential to interested parties or to others to allow their critical assessment. Accordingly, the Commission would recommend that should it be the case that a party intends to provide confidential material in support of a submission, that it also provide a non-confidential version which can be used for public disclosure.

Should the Commission not be in a position to efficiently assess a party's contentions, including by receiving the results of independent critical assessments of them, it will be necessarily constrained in the weight to which it will be able to attach to those contentions. This will particularly be the case where conflicting material is before the Commission that has been critically assessed.

Considered any submissions that were received within the time limit specified by the Commission when it published the undertaking

The time limit specified by the Commission for the receipt of submissions on the undertaking is 5 weeks from the date upon which Telstra makes certain relevant information reasonably available for industry assessment, this being:

- (a) information that is contained in Telstra's confidential submission in support of its undertaking entitled *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 29 October 2003; and
- (b) Telstra's costing model used to derive LSS-specific costs.

The Commission has set the consultation period on this basis to better ensure that interested parties will be in a position to assess the undertakings and make submissions on them. Interested parties wishing to obtain access to this confidential material must notify Telstra by **10 December 2003**. If no parties notify interest in obtaining this information, the 5 week closing date period will effectively begin from this date.

The Commission will publish a notice on its web site confirming the closing date for submissions.

Parties are required to provide any submissions that they intend to make to the Commission by no later than that date. Parties are encouraged to provide their submissions at the earliest possible opportunity.

Following its analysis of the undertakings and the submissions of interested parties, the Commission would expect to publish the findings of its initial analysis and its draft decision. This would occur within a reasonable period after submissions close. The Commission will invite further submissions on its draft decision for a specified period, which will likely be considerably shorter than this initial period.

The Commission would expect that these submissions would be responsive to the draft decision, and would not expect a party to raise any further issues that were not addressed in the submissions that the party made during the initial stage of consultation as discussed above. Parties are advised that, due to the statutory imposed timetable within which the Commission must make its decision, the period within which these responsive submissions will be able to be made will be comparatively brief.

Taking into account the submissions, the Commission will form a view on whether to accept or reject the undertakings and publish the reasons for its decision.

The Commission will have a clearer idea of this timeframe once the period of this initial consultation has been determined.

Consistency with standard access obligations

The SAOs are set out in s.152AR of the Act. Subject to class or individual exemptions made by the Commission, a carrier or carriage service provider must comply with the SAOs in regard to declared services it supplies either to itself or to other persons.³ In particular, s.152AR requires access providers to, among other things:

- supply an active declared service if requested to do so by a service provider (subject to certain limitations) and to take all reasonable steps to ensure that the technical and operational quality of the active declared service supplied to the service provider is equivalent to that which the access provider provides to itself;
- permit the interconnection of the facilities an access provider either owns, controls or is responsible for, with the facilities of a service provider for the purpose of enabling the service provider to be supplied with active declared services;

³ Refer to s.152AS and s.152AT of the Act. The Commission has not made any such exemptions to date.

- take all reasonable steps to ensure that the technical and operational quality and timing of the interconnection is equivalent to that which the access provider provides to itself and is compliant with any technical standards in force under section 384 of the *Telecommunications Act 1997*; and
- provide billing information (if requested by the service provider) at certain intervals and in a certain manner and form.

The Commission will assess whether the undertakings, including the service descriptions, are consistent with the SAOs.

Consistency with Ministerial pricing determination

Division 6 of Part XIC provides that the Minister can make a written determination setting out principles dealing with price or a method of ascertaining price relating to the SAOs. Section 152CI(1) of the Act provides that if a provision of an access undertaking is inconsistent with any Ministerial pricing determination, the provision will have no effect to the extent of the inconsistency.

The Minister has not made a pricing determination under Part XIC to date.

Expiry Date and Term

The expiry time of the undertaking must occur within 3 years after the date on which the undertaking comes into operation.

The LSS undertaking covers the period to 31 December 2004. The undertaking has no effect in respect of the period that precedes any acceptance by the Commission, and may be withdrawn by Telstra before its expiry date.

Terms and conditions are reasonable

An important part of the access regime is the terms and conditions of access (including the price or a method for ascertaining the price). Under Part XIC of the Act, the Commission cannot accept an undertaking unless it is satisfied that the terms and conditions specified are reasonable. In determining whether terms and conditions are reasonable, regard must be had to the following matters:

- whether the terms and conditions promote the long term interests of end-users (“the LTIE”);
- the legitimate business interests of the carrier or carriage service provider concerned, and the carrier’s or carriage service provider’s investment in facilities used to supply the declared service concerned;
- the interests of persons who have rights to use the declared service concerned;
- the direct costs of providing access to the declared service concerned;
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility; and

- the economically efficient operation of a carriage service, a telecommunications network or a facility.⁴

This does not, by implication, limit the matters to which regard may be had.⁵

In considering whether the terms of an access undertaking promote the LTIE, the Commission must consider the achievement of the following objectives:

- promoting competition in markets for telecommunications services;
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.⁶

2.2 Time limit for final assessment

The *Telecommunications Competition Act 2002* has introduced a time limit for the Commission's assessment of undertakings. While the Commission would intend to make its decision as soon as is practicable for it to do so, the Commission must in any event make a decision within 6 months. If it does not do so, it is deemed to have accepted the undertaking. However, the Commission is able to extend its decision-making period for up to 3 months at a time provided it gives a reason for doing so. In addition if the Commission requests further information in relation to the undertaking, the time taken for the Commission to receive the information is excluded from the 6 month period. Similarly, the consultation period specified by the Commission is excluded from this timeframe.⁷

2.3 Confidentiality

The Commission is aware of the need to protect confidential information provided by interested parties. Therefore the Commission is not opposed to parties who wish to have access to such confidential information signing confidentiality undertakings. However, the Commission believes that these confidentiality undertakings should enable the relevant party to view all information supplied by Telstra and other parties to the Commission in these proceedings. Should Telstra or other parties choose not supply any confidential information to parties who wish to have access to it, the Commission's policy is that such information will generally not carry the same weight as information that is available for scrutiny by all sides of an issue or debate.

As noted previously, interested parties wishing to obtain access to Telstra's confidential materials in support of the undertaking **must notify Telstra by 10 December 2003.**

⁴ Sub-section 152AH(1) of the Act.

⁵ Sub-section 152AH(2) of the Act.

⁶ Sub-section 152AB(2) of the Act.

⁷ See the revised section 152BU (5), (6) & (7).

3 Assessment of reasonableness of the undertakings under pricing principles

3.1 Reasonable criteria under section 152AH

In assessing whether the undertaking's terms and conditions are reasonable, the Commission will consider whether the prices are based on the efficient forward-looking costs of the undertaking service. The Commission's *Access Pricing Principles* discuss the relationship between the reasonableness criteria set out in section 152AH of the Act and efficient forward-looking costs.⁸

As discussed above, in determining whether terms and conditions are reasonable, the following matters must be considered:

- whether the terms and conditions promote the LTIE of carriage services or of services supplied by means of carriage services;
- the legitimate business interests of the carrier or carriage service provider concerned, and the carrier's or provider's investment in facilities used to supply the declared service concerned;
- the interests of persons who have rights to use the declared service concerned;
- the direct cost of providing access to the declared service concerned;
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility; and
- the economically-efficient operation of a carriage service, a telecommunications network or a facility.⁹

This does not, by implication, limit the matters under consideration.¹⁰

Application of these considerations in assessing the reasonableness of the undertaking

Long-term interests of end-users

As outlined above, the LTIE will generally be promoted by lower prices (that are sustainable) higher quality of service and greater choice of products. These outcomes will be promoted by:

- competition in markets for telecommunications services;
- any-to-any connectivity; and

⁸ ACCC, *Access Pricing Principles – Telecommunications, a guide*, July 1997.

⁹ Section 152AH(1) of the Act.

¹⁰ Section 152AH(2) of the Act.

- encouraging the economically-efficient use of, and investment in, telecommunications infrastructure.

Promoting competition in markets for telecommunications services

Part XIC is concerned with promoting competition in those markets that are dependent on the services of telecommunications markets (dependent markets). Where existing conditions do not already provide for the competitive supply of these services, Part XIC (including the pricing of access) aims to facilitate access to these services to encourage the efficient entry of firms and efficient competition in dependent upstream or downstream markets.

Any-to-any connectivity

Any-to-any connectivity is the ability of end-users of different networks to communicate. Access prices should not artificially discriminate against the users of any particular network in the provision of any-to-any connectivity and should encourage operators of different networks to configure their networks to promote any-to-any connectivity.

Encouraging economically-efficient use of, and investment in, telecommunications infrastructure

The economically-efficient use of, and investment in, infrastructure comprises three (interdependent) elements:

- dynamic efficiency – firms have the appropriate incentives to invest, innovate, improve the range and quality of services, increase productivity and lower costs through time;
- productive efficiency – firms have the appropriate incentives to produce services at least cost, and production activities are distributed between firms such that industry-wide costs are minimised; and
- allocative efficiency – firms employ resources to produce goods and services that provide the maximum benefit to society in any given period. An important condition for allocative efficiency is that prices for services at least reflect the value society places on the next best alternative use of the resources to produce the service.¹¹

Legitimate business interests of the carrier or carriage service provider concerned

The legitimate business interests of access providers requires the Commission to consider whether the access price would provide a normal commercial return on prudent investment.¹² The services to which Part XIC will mostly apply are provided using highly capital intensive and specialised infrastructure, the costs of which are largely sunk before the service is

¹¹ For example, it would be allocatively inefficient to devote resources to produce telecommunications services that society places a low value on, rather than other services (including other telecommunication services) that society desires highly. Further discussion of these efficiency concepts can be found in ACCC, *Access Pricing Principles – A Guide – Telecommunications*, July 1997, p. 35.

¹² The Commission may also take into account access providers' obligations to shareholders and other stakeholders.

provided. It is legitimate for the carrier or carriage service provider to recover the costs of prudent investment from its commercial activities, including providing access.

However, it is unlikely the legitimate business interests extend to achieving a higher than normal commercial return through the use of market power. For example, an access price should not, in most cases, be artificially inflated because of the lack of competition in the supply of infrastructure services.

Interests of persons who have rights to use the declared service

In the Commission's view, persons who have rights to use the declared service have an interest in competing for the custom of end-users on the basis of their technical and commercial merits. Their ability to compete in the supply of a service in a dependent market should be based on the cost or quality of their service relative to their competitors. For example, an access price should not artificially protect a vertically-integrated access provider from being displaced by a more efficient service provider in a downstream market.

The direct costs of providing access

Direct costs are necessarily incurred/caused by the provision of access. An access price should not be inflated to recover any profits the access provider (or any other party) may lose in a dependent market as a result of the provision of access. As stated in the relevant explanatory memorandum:¹³

... '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.

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

An access price should not lead to arrangements between access providers and access seekers that will encourage the unsafe or unreliable operation of a carriage service, telecommunications network or facility.

The economically-efficient operation of a carriage service, a telecommunications network or facility

This criteria is similar to the productive and allocative efficiency elements described above. An access price should encourage access providers to select the least-cost method of providing the service and provide those services most highly valued by access seekers.

3.2 Total service long-run incremental cost (TSLRIC)

The Commission has previously considered access prices based on a TSLRIC approach to be consistent with the reasonableness criteria under s.152AH of Part XIC of the Act in circumstances where the declared service is well developed, necessary for competition in

¹³ Commonwealth, *Trade Practices Amendment (Telecommunications) Bill 1996* Explanatory Memorandum, p. 44.

dependent markets, and the forces of competition work poorly in constraining prices to efficient levels.¹⁴

The concept of TSLRIC can be understood by breaking it up into its components.

- ‘Total service’ refers to the cost of production of an entire service (or a production element) not to the cost of a particular unit.
- ‘Long run’ refers to a cost concept where all factors of production can be varied. In the short run the amount of at least one factor of production (usually capital equipment) is fixed.
- ‘Incremental cost’ is a form of marginal cost, although not the more familiar ‘marginal cost’ where the change in cost is incurred through a small change in the **amount** of output produced. Rather, incremental cost is the annual incremental or additional cost the firm incurs in the long run in providing the relevant service increment (or production element) as a whole, assuming all of its other production activities remain unchanged. In the case of the total service incremental cost, the service increment is the cost of production of an entire service.
- It is also an attributable cost concept as it refers only to those costs that can be attributed to the production of the service.
- In practice TSLRIC is usually defined to include a contribution to indirect or organisation-level costs (‘TSLRIC+’).

Given these attributes, TSLRIC can also be defined as the total cost (on an annual basis) the firm would avoid in the long run if it ceased to provide the service as a whole.

In a practical sense TSLRIC consists of the sum of the operating and maintenance (“O&M”) costs, as well as the capital costs that the firm incurs in providing the service as a whole. *Operating costs* are the continuing operational costs of providing the service, including the labour and materials costs that are causally related to the provision of the service. *Capital costs* comprise the cost of capital (i.e. the opportunity cost of debt and equity used to finance the firm) and depreciation (i.e. the decline in economic value of assets) of capital that is specific to the production of the service.

3.3 Commission’s Pricing Principles for the LSS

As part of the Commission’s declaration of the LSS, the Commission published LSS pricing principles. These principles outline the Commission’s preferred approach to the pricing of this service. The motivation for publishing pricing principles for declared services is that they provide a means to guide commercial negotiations, and/or signal the Commission’s likely approach in the event of an arbitration dispute or the assessment of an undertaking. Accordingly, in the context of the current undertaking, the Commission considers it appropriate that it places significant weight on its LSS pricing principles in assessing the price terms of Telstra’s undertaking.

¹⁴ ACCC, *Access Pricing Principles — A Guide – Telecommunications*, July 1997, p. 35.

Broadly, the Commission's pricing principles can be characterised as cost-based, and reliant on the TSLRIC principle. The Commission's principles consider two types of cost are relevant the price of a LSS – incremental LSS-specific costs and some allocation of the costs of a line over which a LSS is provided.

LSS-specific costs are the costs the access provider incurs in wholesaling the service to an access seeker. The costs are similar in nature to ULLS-specific costs and include IT system development and operational costs, connection costs, wholesale management costs as well as indirect costs.

With regard to whether some allocation of the costs of a line used to provide a LSS should be included in the price of a LSS, the pricing principles note that where Telstra is recovering its line-related costs through other revenue sources, the Commission believes it would be inappropriate to include any allocation of line costs in the price of a LSS.

The Commission's current analysis of the data it collects as part of its Regulatory Accounting Framework shows Telstra already fully recovers its line-related costs through a range of revenue sources. Accordingly, the Commission believes that, at this stage, it would be inappropriate to include any allocation of line costs in the price of Telstra's LSS.

Hence, the price of Telstra's LSS should only equal its LSS-specific costs.

3.4 Telstra's proposed terms and conditions of access

Pricing of LSS

Telstra's undertaking provides that the monthly rental charge applicable to the LSS would be \$15 per service in operation per month. In its preliminary submission supporting its undertaking¹⁵, Telstra notes that while its cost modelling suggests that the efficient LSS-specific costs are in excess of \$57, these costs are significantly above the prices that currently prevail in the market. Therefore, to avoid 'rate shock' Telstra is proposing a price of \$15 which reflects the upper end of the current commercial arrangements.

Telstra states that the price proposed in the undertaking reflects the incremental or LSS-specific costs of providing the LSS to access seekers and does not include any allocation of the line costs involved in the provision of the service. Considering that the LSS is a relatively new service in the Australian market, Telstra states that it is appropriate that the efficient cost of its provision be calculated based on a combination of actual and estimated expenditures. Specifically, Telstra's methodology for determining the undertaking price involves:

- the estimation of the capital expenditure required to provide the LSS comprising the costs associated with the development of software for network and front of house systems, which is initially allocated across time using the tilted annuity formula;
- the estimation of the O&M expenditure required to provide the LSS comprising of labour for front of house service operations and wholesale product management, which is initially allocated to the year in which the expenses are incurred;

¹⁵ Telstra's Submission in Support of its Undertaking dated 1 September 2003 ('preliminary submission')

- the application of indirect O&M percentages based on an internal 2001 study of indirect costs to estimate a contribution to indirect costs; and
- the unitisation of annual costs and the reallocation of costs across time with any unrecovered LSS-specific costs being moved forward to be recovered in future periods with the allocation to any one period capped to avoid rate shock.¹⁶

The various steps identified above are explained in detail in Telstra's submission entitled *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 30 September 2003.¹⁷ Further information regarding the proposed quantum of capital, O&M and indirect costs and the treatment of capital costs can be found in Telstra's confidential submission entitled *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 29 October 2003, as well as Telstra's costing model.

In addition, Telstra provides an international benchmarking study carried out for countries in Europe and Asia and for six US states which shows that its proposed rate is the mid range of the jurisdictions examined.¹⁸

The Commission seeks interested parties' views on how Telstra's proposed price meets each of the reasonableness criteria under Section 152AH of the Act. Does the proposed LSS access charge promote competitive neutrality with regard to an efficient access seekers' ability to compete with Telstra in dependent downstream markets?

The Commission seeks comment on the appropriate pricing principles relevant to assessing Telstra's pricing proposal.

The Commission seeks comment on Telstra's contention that the proposed LSS price is at the upper end of currently negotiated rates.

The Commission seeks the views of interested parties on the appropriateness of using TSLRIC to calculate the efficient costs of supplying the LSS access service.

¹⁶ This is discussed in *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 29 October 2003, p. 6.

¹⁷ Telstra submission *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 30 September 2003, pp. 1-4.

¹⁸ Annexure B in Telstra submission *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 30 September 2003.

The Commission seeks the views of interested parties on the appropriateness of Telstra proposed LSS access charge only comprising the incremental or LSS-specific costs of providing the LSS to access seekers.

The Commission seeks the views of interested parties on the appropriateness of Telstra cost model used for the purpose of calculating its claimed LSS-specific costs.

The Commission seeks the views of interested parties on the appropriateness of the WACC (including WACC parameters) used by Telstra for the calculation of LSS-specific costs

The Commission seeks the views of interested parties on the appropriateness of Telstra's methodology for the calculation of capital, operational and maintenance, and indirect costs.

The Commission seeks the views of interested parties on the issue of whether there is any commonality in the efficient provision of the LSS and Unconditioned local loop service (ULLS) to access seekers, and any implications this commonality may have for the calculation of efficient LSS-specific costs.

The Commission seeks the views of interested parties on the appropriateness of Telstra proposed LSS access charge relative to the ULLS access prices that the Telstra has proposed in context of its core services undertakings.

The Commission seeks the views of interested parties on the appropriateness of the adjustment mechanism proposed by Telstra for reallocating any unrecovered LSS-specific costs through prices in future periods beyond the scope of the undertaking.

The Commission seeks the views of interested parties on Telstra International benchmarking study and any other relevant information regarding the LSS experience in overseas jurisdictions.

The Commission seeks the views of interested parties on whether there are any other important terms and conditions of access which should be considered by the Commission that are not contained in Telstra's proposed undertaking.

Demand estimates

As discussed above, LSS-specific cost charges are derived by calculating the quantum of underlying capital and operational costs incurred by an efficient access provider and then allocating these costs across the relevant number of services in operation (SIO). Accordingly, a key variable in the derivation of an appropriate per service charge for LSS-specific costs is the demand assumptions used for the unitisation of costs.

In its submission, Telstra states that there were a total of 28 LSS lines in operation as at 25 September 2003.¹⁹ Telstra proposes the following LSS demand forecasts as inputs into its pricing model to calculate its claimed costs of the LSS.

Table 1 - Telstra LSS Annual Cumulative Forecasts²⁰

2002/03	2003/04	2004/05	2005/06
6	1426	4751	8171

The Commission notes that, as in the case of ULLS-specific costs, there is a problem of circularity regarding demand estimates and LSS prices under the current methodology for calculating LSS-specific cost charges. Under this approach, estimated demand, *ceteris paribus*, is inversely related to the LSS-specific costs charge, such that reducing the estimated demand used for calculating LSS-specific costs charges will increase the access price. This increase in the LSS price, in turn, will have the effect of further reducing the level of realised demand for the service going forward. Thus, the relationship between estimated demand and realised demand, via the LSS price, has a reinforcing effect which may exacerbate the problem of LSS take-up for future periods.

In determining model ULLS access prices²¹, the Commission chose to adopt an “aspirational” demand approach to break this problem of circularity. This involved projecting forward a reasonably optimistic view of demand for ULLS by taking account of where overall

¹⁹ Telstra submission *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 30 September 2003, p. 7.

²⁰ Telstra submission *Information Requested by the ACCC Regarding Telstra Spectrum Sharing Undertaking* - dated 30 September 2003, p. 8.

²¹ Refer to ACCC, *Final Determination for model price terms and conditions of the PSTN, ULLS and LCS, October 2003*, pp. 82-84.

broadband demand may be over the next three years, reflecting an appropriate level of broadband take-up and competition. This approach was complemented by an adjustment mechanism for prices in order to account for demand uncertainty.

On preliminary analysis, the Commission considers that taking a similar approach to demand forecasts for the LSS may be an appropriate option. This could be implemented through projecting forward demand based on the objective of achieving broadband penetration rates on par with other developed countries and the assumption that LSS will become one of the key mediums for the delivery of ADSL by access seekers. The Commission considers that the resulting demand forecast inputs would likely lead to the LSS access charge being less than the \$15 proposed by Telstra in the undertaking.

The Commission seeks the views of interested parties on the appropriateness of Telstra's demand estimates.

What are the main factors for the poor take-up of the LSS so far? What method should be utilised for forecasting ULLS demand?

The Commission is interested in the views of industry on their demand estimates with respect to the LSS.

What approach should the Commission use for addressing the problem of circularity in estimated and realised demand discussed above?

Service Description

In declaring the LSS, the Commission chose to adopt the following service description:

The High Frequency Unconditioned Local Loop Service is the use of the non-voiceband 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.

The terms and conditions set out in Attachments A, B and C of the undertaking are generally expressed to apply to the supply by Telstra of the "Telstra Wholesale Spectrum Sharing

Service”. The “Telstra Wholesale Spectrum Sharing Service” is defined in clause 2 of Attachment 1 to the undertaking.²² This description is not identical to the description of the declared service (being the service specified in Annexure 1 to the declaration of the “High Frequency Unconditioned Local Loop Service (Line Sharing Service)”²³

The Commission seeks the views of interested parties on the appropriateness of Telstra’s proposed service description in clause 2 of Attachment A to the Undertaking. Is the Telstra Wholesale Spectrum Sharing Service a form of the declared service?

Additionally, the Commission notes that it is unclear whether clause 2 of Attachment A is intended to “cover the field”. That is, whether the Undertaking is intended to preclude an arbitration determination from requiring Telstra to supply the LSS in a form other than that set out in clause 2 of Attachment A.

The Commission seeks the views of interested parties on the reasonableness of the proposed service description in the case where the undertaking is intended to preclude an arbitration determination from requiring Telstra to supply the declared service in a form different to that set out in the undertaking.

²² Although the definition of “Telstra Wholesale Spectrum Sharing Service” in clause 1.1 of the undertaking refers to the entire Attachment A, Telstra has clarified that the description of the service is that set out in clause 2 of Attachment A.

²³ See Gazette No GN 41, 16 October 2002 pp 2272-2773.