Australian
Competition &
Consumer
Commission

Model Price Terms and Conditions for PSTN, ULLS and LCS

Discussion Paper

April 2003

1. Introduction

The Australian Competition and Consumer Commission ('the Commission') is currently in the process of determining non-binding model terms and conditions of access for each of the "core" services[1] including price related terms.[2]

This task is one of a number of Government initiatives designed to meet its policy objectives ensuring access is provided in as timely a way as possible. Publication of indicative prices will provide parties with greater certainty about the likely outcome of regulation and thereby facilitate commercial negotiation.[3]

This paper consolidates the Commission's work to date in relation to access prices for core services. In detailing this information, the Commission intends to provide interested parties with a complete view of all previous considerations. It also enables the Commission to raise further issues in light of these considerations.

The Commission is also in the process of assessing the reasonableness of prices at which Telstra proposes to provide the core services pursuant to access undertakings that were lodged on 9 January 2003.

While indicative pricing and undertaking assessment processes are distinct, and will require the Commission to assess reasonable price related terms based upon the information available to it at the time it makes each of these decisions, the Commission believes it is appropriate to conduct these processes as far as possible in parallel.

The Commission has designed the following process not only to prevent unnecessary duplication of work by both the Commission and interested parties, but also to ensure the Commission's legislative responsibilities in determining indicative price terms and conditions are satisfied in as timely a way as possible.

The considerably tight time-frames involved in this exercise when coupled with the need for parallel processes to assess the related core service undertakings may mean that the Commission may not be able to finalise all pricing aspects relevant to the consideration of Telstra's undertakings prior to it forming a view on indicative prices. In this regard, it should be noted that while the determination of model terms and conditions under section 152AQB needs to be made within six months and has effect for five years, it can be revoked or varied at any time. The Commission would consider either amendment or replacement of the first determination should circumstances require.

It should also be noted that, concurrent to the process of setting indicative prices as part of model terms and conditions, the Commission is also in the process of

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1 These core services are defined as the :

- the Domestic Public Switched Telephone Network Originating Access Service;
- the Domestic Public Switched Telephone Network Terminating Access Service;
- the Unconditioned Local Loop Service;
- the Local Carriage Service; and
- any additional core service specified in regulations by the Minister.

2 New section 152AQB of the *Trade Practices Act 1974* as amended in Schedule 2 of the Telecommunications Competition Act 2002.

3 'Government boost to telecommunications competition' Minister for Communications, Information Technology and the Arts, *Media Release*, 24 September 2002.

establishing non-price models terms and conditions. The Commission is currently consulting with industry parties on a specific set of contentious non-price areas as contained in existing industry agreements, with a view to releasing a draft position paper in May. It is intended that the Commission's final position on these matters will be published in conjunction with the price related terms discussed in this paper. This will give effect to the Commission's responsibilities under section 152AQB of the TPA to make a determination on model terms and conditions.

The Commission calls for submissions on this paper and for the submissions on specific issues or other documents referred to in this paper by **30 April 2003.**

Please forward any written submissions to:

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1. Legislative requirements and criteria

Under Part XIC of the *Trade Practices Act 1974* ("Act"), the Commission must, among other tasks:

- approve (or otherwise) undertakings submitted by access providers which may include the terms and conditions of access to declared telecommunications services[4]; and

- arbitrate disputes between parties concerning the terms and conditions of access to declared telecommunications services.[5]

In addition, the recent enactment of the *Telecommunications Competition Act 2002* ("the Competition Act") has made certain amendments to the telecommunications industry regulatory regime in Parts XIB and XIC of the *Trade Practices Act 1974*. The insertion of section 152AQB has initiated a requirement upon the Commission to publish by written determination non-binding model terms and conditions of access for each of the "core" services.

These core services are defined as:

- the Domestic Public Switched Telephone Network Originating and Terminating Access Services ("PSTN O/T");

- the Domestic Public Switched Telephone Network Terminating Access Service;

- the Unconditioned Local Loop Service ("ULLS");

- the Local Carriage Service ("LCS"); and

- any additional core service specified in regulations by the Minister.

The Commission may take into account any model terms and conditions it sets when conducting any future arbitrations.

The Commission is to take all reasonable steps to publish its determination of model terms and conditions for core services within six months of the amendments or a regulation coming into force and must consult with interested parties and the Australian Communications Authority (ACA) before making a determination. The determination can have effect for up to five years, although it can be revoked at any time prior to this. Similarly, the Commission considers that a determination can be varied should circumstances require.

The object of Part XIC of the Act is to promote the long-term interests of end-users (the LTIE) of carriage services or of services provided by means of carriage services.[6] This will be achieved, in part, through establishing the rights of third parties to gain

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[4] Declared services are services declared under Part XIC of the Act. Refer to section 152AL of the Act.

[5] Under the *Telecommunications Act 1997*, the Commission also has responsibilities to arbitrate disputes over the terms and conditions for matters such as preselection and number portability.

[6] Sub-section 152AB(1) of the Act.

access to services that are necessary for the competitive supply of services to end-users.

In considering whether declaration of a service, approval of an access code or an access undertaking or the making of an arbitration determination will be in the long-term interests of end-users, 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.[7]

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 draft an access code[8] or accept an undertaking unless satisfied that the terms and conditions specified are reasonable.[9] In determining whether terms and conditions are reasonable, regard must be had to the following matters:

- whether the terms and conditions promote 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.[10]

This does not, by implication, limit the matters to which regard may be had.[11]

When arbitrating access disputes the Commission must have regard to the same matters. In addition, the Commission must take into account in making a

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7 Section 152AB(2) of the Act.

8 Note that recent amendments to Part XIC remove references to the TAF and the TAF access code. Reference is simply made to an access code made by the ACCC.

9 The Commission must also ensure that the terms and conditions in undertakings and any arbitration determination is consistent with any Ministerial pricing determination in place. See section 152CH of the Act.

10 Sub-section 152AH(1) of the Act.

11 Sub-section 152AH(2) of the Act.

determination the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else.[12]

[12] Paragraph 152CR(1)(e) of the Act.

2. The Declared services

The Commission declared the PSTN O/T service in July 1997. The declared domestic PSTN O/T services are, in general, provided by means of a fixed-line network. They are used as inputs by access seekers primarily to supply long-distance, international, fixed-to-mobile and mobile-to-fixed calls to end-users in Australia. They can also be used by other network operators to interconnect with Telstra's fixed network.

The ULLS involves the use of unconditioned cable, primarily copper pairs, between end-users and a telephone exchange, where the unconditioned cable terminates. This service enables access seekers to supply advanced, high-speed data services, such as xDSL (digital subscriber line), to customers as well as local and long-distance and international voice services in competition with Telstra. The Commission declared the ULLS in August 1999.

The LCS is a service for local call resale. This involves the carriage of telephone calls from an end-user's premises to another end-user in the same standard zone.[13] This allows service providers to provide local calls in competition with Telstra. After holding a public inquiry, the Commission declared the LCS in August 1999.

Pricing methodologies for declared services

In it previous pricing considerations for the PSTN O/T, ULLS, and LCS, the Commission has employed two pricing approaches; the Total Service Long Run Incremental Cost ("TSLRIC") approach and the Retail-minus approach.

The TSLRIC approach used in the pricing of the PSTN O/T and ULLS takes account of the incremental or additional costs the carrier incurs in the long run in providing a service, assuming all other production activities remain unchanged. Under this approach, common costs associated with providing the regulated service (such as the PSTN O/T and ULLS) and other services should be divided among all those services. This contrasts a stand-alone methodology whereby one service using common elements bears the entire cost of those elements and other services are treated as increments added to it.

The Retail-minus approach used in the case of the LCS determines the wholesale price of a service by subtracting retail costs from the retail price of the service.[14]

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[13] Standard zone has the same meaning as in Part 4 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

[14] See: ACCC, *Access Pricing Principles – Telecommunications, A guide*, July 1997; and ACCC, *Local Carriage Service pricing principles and indicative prices, Final Report (Revised)*, April 2002.

3. Previous Papers on Model Terms and Conditions

As noted above, section 152AQB of the Act places a new requirement on the Commission such that it must publish non-binding model terms and conditions of access for each core service. In particular, section 152AQB(3) requires the Commission to make reasonable endeavours to formulate such a determination by June 2003. For the purpose of this process, the Commission has so far published the following papers:

- Future Access Pricing Approaches for PSTN, ULLS and LCS – Discussion Paper (September 2002)

- The Need for an ADC for PSTN Access Service Pricing – Draft Position Paper (February 2003)

Future Pricing Principles Discussion Paper

In anticipation of the Commission's requirement to set indicative or model price terms or conditions for PSTN O/T, ULLS and LCS, a discussion paper was released to gauge industry views as to how such indicative prices should be set. The paper considered the need for the setting of indicative prices and discussed a number of alternative approaches to future pricing of the core services. The Commission also took the opportunity to outline its current views on certain aspects of its access pricing principles.

The Commission canvassed three general approaches to calculating indicative prices for PSTN O/T and ULLS access:

- Using an economic cost model to reset prices for each period;

- Using an economic cost model, appropriately modified and updated, to establish a starting point period's price to which an adjustment factor can be applied; and

- Establish both the starting point period's price and price path using the outcomes of previous cost modelling work and with some limited adjustments going forward.

With respect to future pricing of LCS, two general approaches to calculating indicative prices were outlined, both using a Retail-minus retail costs methodology. Under both approaches, indicative retail costs along with the prevailing retail price of local calls for the relevant regulatory period would be used to calculate LCS prices.

The Commission suggested that it should publish indicative prices for PSTN O/T, ULLS and LCS retail costs for the next three regulatory periods (in this case the next three financial years).

The Commission received submissions from interested parties in response to this discussion paper, public versions of which have been published on the Commission's website as part of the process of public consultation.

In particular, Telstra believes that a TSLRIC model should be used to set prices for all three services for one year, at the beginning of each year. Telstra suggests its PIE II model is the most appropriate for this purpose. It considers the inputs into the model should be based on the most up-to-date and best *ex ante* information available. While

Primus agrees that PSTN O/T and ULLS pricing should be based on TSLRIC, it argues a scorched node approach should be taken and other technologies (such as IP networking) be considered.

Optus contends that PSTN O/T and ULLS indicative prices should be set every three years based on the economic model in first year, and forecasts for the following years based on the adjustment factor formula. In its view, LCS prices for the first year of the three year period should be set on a retail minus avoidable cost methodology with the price for the remaining two years set using an adjustment factor. However, Optus believes an average of all Telstra's retail offerings should be considered rather than the unbundled standard call price when determining the LCS price.

AAPT believes that an updated TSLRIC cost model should be used to calculate the starting PSTN O/T and ULLS charges, and that the LCS prices should be determined using a retail minus retail costs method. AAPT seems agreeable to the adjustment factor process for setting indicative prices for the last two years of a three year period, however it warns that indicative prices for three years should be re-established at the beginning of each year.

PowerTel also agrees with the TSLRIC approach to setting PSTN O/T and ULLS charges in the first year with an adjustment factor applied to these charges to calculate future years' prices, while Macquarie Corporate Telecommunications warns that there should be some mechanism for addressing any significant and unforseen changes that impact the price.

While it has not yet reached a definitive position on the appropriate methodology for the future setting of model price terms and conditions, the Commission has preliminary views on the appropriate methodology. These are discussed further in Section 7 below.

Access Deficit Contribution Discussion Paper

In February 2003, the Commission released its discussion paper entitled *The Need for an ADC for PSTN Access Service Pricing*. The access deficit contribution ("ADC") refers to a contribution, additional to the efficient economic costs of access to a service, by access seekers which may be appropriate to the extent that Telstra is constrained from efficiently recovering the relevant line costs from its retail customers due to the presence of formal retail price controls.

This aim of this paper was to review both the rationale and possible size of the ADC taking account of additional information and examination undertaken by the Commission since 2000. The paper also explicitly considered the appropriateness of an additional local call surcharge being included in access prices.[15] This paper was intended to stimulate further debate on this aspect of current access pricing practice and solicit the views of interested parties.

The Commission considered that it was appropriate that the issue of the ADC be examined at this time. First, the issue is clearly relevant to the Commission's further work on setting model price terms and conditions or indicative charges for PSTN O/T

[15] Telstra claims that due to restrictions placed upon it, it is unable to recover local calls' portion of the access deficit from local calls. It argues that this portion of the access deficit should be re-distributed over other PSTN calls. The additional burden on the PSTN O/T is termed the local call surcharge.

services, one of three core services for which the Commission is required to do so under the new section 152AQB. Second, the Commission has been asked by Telstra to examine whether its 2003 PSTN O/T undertaking is reasonable.[16] In the Commission's view it is important that its views on the ADC are clearly established as part of both its decision on indicative prices for PSTN O/T services and its decision on Telstra's PSTN O/T undertakings.

The Commission has received submissions from interested parties in response to this discussion paper, public versions of which have been published on the Commission's website as part of the process of public consultation. The Commission will consider these submissions when coming to a view on the ADC, as part of reaching a position on model price terms and conditions. There is no need for parties to make further submissions on this issue in response to this paper.

[16] Telstra lodged undertakings for all three core services with the ACCC on 9 January 2003 – refer below for further discussion.

4. PSTN O/T, ULLS and LCS Undertakings

Telstra lodged access undertakings (“the undertakings”) with the Commission on 9 January 2003. The undertakings specify the terms and conditions upon which Telstra proposes to meet its standard access obligations to supply PSTN O/T, ULLS, and LCS. The undertakings cover the 2002/03 to 2004/05 financial year periods, which is identical to the periods the Commission’s Future Pricing Principles Discussion Paper considered.

Submissions Supporting PSTN O/T, ULLS and LCS Undertakings

Telstra has submitted two separate supporting submissions related to the undertakings it lodged with the Commission on 9 January 2003. These consist of:

- Telstra’s 9 January 2003 supporting statement which was published on the Commission’s website on 17 January 2003; and

- The submission entitled “Telstra’s Submission in Relation to the methodology used for Deriving Prices Proposed in its Undertakings dated 9 January 2003”. The confidential version of this submission was submitted to the Commission on 13 February 2003 with the public version submitted on 21 February 2003.

The latter submission contains confidential information which parties may access by signing the relevant confidentiality undertakings with Telstra. The Commission published a public version of these documents on its website on 18 March 2003 as part of its public consultation process for the assessment of the undertakings.

Both the supporting submissions discuss the pricing principles and modelling methodology, including input assumptions, used by Telstra to arrive at the proposed prices for PSTN O/T access, ULLS and LCS contained in the undertakings and supporting submissions.

Undertakings Discussion Paper

The Commission released a discussion paper relating to Telstra’s undertakings on 18 March 2003, for the purpose of informing parties of the matters the Commission must take into consideration in making the decision to accept or reject an undertaking. This reflects the open and public process the Commission follows in assessing access undertakings, allowing parties to express their views and provide relevant information to the Commission.

The paper outlines the process the Commission will follow in assessing the undertakings, while also informing parties of the issues which the Commission would particularly like addressed in submissions.

The Commission expects to receive submissions from interested parties in response to this discussion paper no later than 4 weeks from the date upon which Telstra makes certain relevant information reasonably available for industry assessment, being information contained in Telstra’s confidential submission in support of its undertakings as well as other supporting information. The discussion paper covers a wide range of pricing issues which are also pertinent to this indicative pricing process.

5. Process for Finalising Model Price Terms and Conditions

The Commission's future process regarding indicative pricing for the core services will combine the current and previous processes already in progress discussed above.

As discussed above, the Commission has released three discussion papers in recent periods which focus on topics all relevant to the determination of indicative prices. These are:

- Future Access Pricing Approaches for PSTN, ULLS and LCS;
- The Need for an ADC for PSTN Access Service Pricing;
- Telstra's Undertaking for Domestic PSTN Originating and Terminating Access, Unconditioned Local Loop Service and Local Carriage Service.

All of these processes address the issue of access pricing for the same set of core services. The range of matters examined within these concurrent processes overlap considerably with regard to the issues relevant to the determination of indicative prices for core services. In the Commission's view, it is appropriate that these related issues be dealt with in parallel.

In consideration of these factors, the Commission believes that streamlining these processes will enable a timely resolution to the Commission's legislative requirements under Section 152AQB of the Act, while at the same time avoiding the real prospect of unnecessary duplication in relation to the processes of public consultation.

Cross-consideration of submissions

The Commission has received submissions in response to the discussion papers regarding the determination of future access prices for PSTN O/T, ULLS and LCS and the need for an ADC for PSTN O/T access pricing. Submissions are also expected in response to the recently released discussion paper regarding Telstra's undertakings for PSTN O/T, ULLS and LCS.

To the extent that the issues discussed in these submissions are also of relevance, these submissions will also be considered as part of the Commission's process of determining indicative pricing. Similarly, the Commission would intend to also have regard to submissions that it receives in respect of indicative prices for the purpose of informing its decision on these other regulatory processes.

Accordingly, interested parties that wish to make submissions in relation to indicative pricing and specifically in the matters raised in section 4 above are encouraged to do so. This said, where matters have already been addressed in earlier submissions, parties are encouraged to identify those sections of earlier submissions to avoid unnecessary duplication of work.

Timetable for completion

As noted earlier, the Competition Act 2002 amendments have introduced time limits for both the Commission's determination of indicative prices and for assessing undertakings. The insertion of Section 152AQB requires the Commission to take all reasonable steps to finalise it's determination of indicative pricing for core services by June 2003.

In addition, the Commission is aware that a number of current agreements regarding core services will run out around the same time. Therefore, the setting of indicative prices, at least for the next regulatory period (financial year) is a pressing matter.

While the Commission will have regard to 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. It should be noted that given the tight deadlines the Commission faces for completing the new regulatory requirements, it may need to be less flexible in granting extensions for submissions than on previous occasions.

The Commission aims to release a draft position paper regarding indicative pricing by May. The Commission will consider all submissions made as part of this process when arriving at its draft position. However, due to tight time constraints, the Commission must receive all submissions in response to the issues generated by this paper by **30 April 2003**. The Commission would also have regard to any submissions on the undertakings which are made before this time or where the parties have also sought to refer their undertaking submissions to this process. Submissions on the access deficit which have already been received will also be taken into account.

Given that the Commission will need to continue its assessment of Telstra's core service undertakings during this period and the timeframe for submissions is somewhat more flexible, particularly in relation to the consideration of confidential material, it may be that the Commission will need to form views on model price terms and conditions which are of a more preliminary nature. In the Commission's view, there is no need for it to complete its assessment of the undertakings or to finalise its position on *all* TSLRIC modelling issues before it can provide a view on model price terms and conditions, which are indicative or non-binding in nature.[17]

However, in order to allow it enough time to consider all relevant arguments for the purposes of this exercise, the Commission would appreciate parties' submissions at least on broader matters, which do not require consideration of confidential information, within the stated timeframes. This should not prevent parties wishing to make further submissions on confidential information as part of the undertaking process, once they are in a position to do so. Any such earlier submissions would of course also be taken into account in the undertakings process if parties so wish, thus avoiding unnecessary duplication in this regard.

[17] As noted above, the Commission considers that it can amend or replace the first determination at a later stage if circumstances require. For example, if following the Commission's finalisation of Telstra's undertakings, it became necessary to modify its position on specified pricing-related issues.

6. Methodological Issues

The following matters that arise in the Commission's previous papers on indicative pricing are revisited for specific consideration and to draw out specific issues in relation to which comments are sought:

- TSLRIC pricing methodologies;
- the use of a specific economic model;
- use of adjustment factor approach; and
- pricing of LCS.

In addition to the above matters (which are discussed further below) the Commission may also consider whether publishing a range of indicative prices rather than a single point estimate, would be appropriate. As noted earlier, the Commission, due to legislative requirements and the fact that as number of current core services agreements will soon end, needs to set model price terms and conditions by June 2003. Due to the short time-frame the Commission may not arrive at a firm view in relation to all the inputs in setting model price terms and conditions or in respect of the modelling approach that would be involved. It therefore may be prudent for the Commission to set a range of possible indicative prices.

The Commission would be interested in any views about the merits of publishing a range of prices for the purposes of setting indicative or model price terms and conditions.

The Commission invites parties' comments on the publication of a range of indicative prices, rather than point estimates.

Pricing of PSTN O/T and ULLS

In its previous discussion paper on indicative pricing[18], the Commission outlined three possible general approaches to calculating indicative prices for PSTN O/T and ULLS access:

- Use an economic cost model to reset prices for each period;
- Use a cost model, appropriately modified and updated, to establish a starting point period to which an adjustment factor can be applied; and
- Establish both starting point and price path using the outcomes of previous cost modelling work and with some limited adjustments going forward.

[18] ACCC, *Future Access Pricing Approaches for PSTN, ULLS and LCS, Discussion Paper*, September 2002.

Regardless of which approach is adopted, the Commission has the option to set indicative prices at the beginning of each new regulatory period, or at the beginning of the next regulatory period for a number of future periods (eg, 1,3 or 5 years).

The Commission's preliminary view was that indicative prices for PSTN O/T and ULLS services should be set by using a TSLRIC-based model as a starting point (price for the first regulatory period) and then applying an adjustment factor to calculate indicative prices for the following periods. It was suggested that the Commission would publish PSTN O/T and ULLS indicative prices for the next three regulatory periods.

Choice of model – PIE II

The Commission has only recently had access to the PIE II model, and is still examining the model and testing a number of parameter and other input variables. Whilst the model, subject to industry responses and further examination of its underlying properties including its approach to modelling of Telstra's forward-looking network, may well be seen as an appropriate tool of analysis, it is somewhat premature to propose the model at this stage as the preferred means of estimating Telstra's network costs.. The Commission therefore proposes that further scrutiny be made of Telstra's PSTN Ingress/Egress ("PIE II") model and would expect Telstra to make this model available to interested third parties as part of the undertaking process. In any case, if the PIE II model is to be used for the purposes of any glide-path or adjustment approach, at the very least, all the assumptions behind, and inputs into, the PIE II model would be those the Commission considers appropriate.

Why PIE II

While the Commission believes that the PIE II model requires considerably more scrutiny, the model does appear to have certain advantages compared to other possible models that could be used. In particular, the model has updated asset values and network configuration. Also, while other models use averages, PIE II is designed to model each individual service in use when building the PSTN as accurately as possible. Further, while PIE II is current, models previously used by the Commission and other parties (such as the n/e/r/a model) would require significant revisions and augmentation. This would make it more difficult to use such models in a timely fashion to determine indicative prices, at least for the next financial period, 2003-04.

Such advantages, however, would also need to be set against any other aspects of the model which may not be consistent with forward-looking methodologies. Certain issues in this regard are noted in the Commission's undertakings discussion paper and are also briefly referred to in the next section.

Public scrutiny of PIE II

Naturally, the Commission expects that any model to be used in setting an indicative price would be open to public scrutiny. However, it is important to recognise that the model should be treated as material confidential to Telstra. The Commission has put in place a process for public scrutiny of the PIE II model as part of the assessment of

Telstra's core services undertakings.[19] The Commission therefore proposes that parties wishing to review, and comment on, the PIE II model for the purposes of the indicative pricing process follow the procedure set out in the Commission's discussion paper on Telstra's core services undertakings. This means further scrutiny of the PIE II model would occur as part of the undertaking assessment process.

As noted above, appropriate scrutiny of the PIE II model may not be complete by the time submissions to this paper are due. For the purposes of making an initial determination on model terms and conditions, therefore, the Commission may need to form views on indicative prices which are not strictly based on a particular cost model. This means it may be necessary for the Commission's views to be revised once the undertaking and related modelling consideration is complete. It may also justify the use of a price range, at least in relation to any initial determination.

PIE II assumptions and inputs

As noted earlier, assumptions behind, and inputs into the PIE II model (or any other model) would have to be those the Commission finds appropriate. In particular, the Commission will need to be satisfied that the following are satisfied by selecting assumptions and inputs:

- the appropriate TSLRIC model is constructed;
- appropriate weighted average cost of capital ("WACC") is set;
- appropriate demand estimates and other inputs are used.

The Commission has so far preferred a TSLRIC model that follows a scorched node approach, and which is one that models the access provider's network as it would look if it were optimised. This has implications for a number of assumptions and inputs into the model, such as the existence of network planning costs, and the level of trench sharing in new estates. The Commission would need to see substantial new arguments if it were to move away from this position.

A traditional point of dispute is the appropriate WACC used in any economic model. The Commission will need to form a view on the appropriate variables used to derive the WACC (such as the appropriate risk-free rate, market risk premium, and asset beta) before the WACC, which is expected to have a significant impact on the indicative price, is set.

Finally, a TSLRIC model is sensitive to a number of other parameters, including demand estimates and asset lives and mark-ups for indirect, and operation and maintenance costs. Therefore, it is important that the inputs used in any TSLRIC model are consistent with the legislative criteria.

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[19] ACCC, *Telstra's Undertaking for Domestic PSTN Originating and Terminating Access, Unconditioned Local Loop Service and Local Carriage Service, Discussion Paper*, March 2003, p. 20.

The Commission is interested in parties' response to the issues set out in the undertaking discussion paper on these matters[20], with any appropriate additions, for the purpose of submitting responses to this discussion paper.

Re-calculation of PSTN O/T and ULLS prices using an adjustment factor

The PSTN O/T conveyance cost and ULLS cost adjustment factor

To calculate the adjustment factor applied to the TSLRIC-based starting point, the following factors need to be considered

- the change in the consumer price index (CPI);
- the technology factor (due to changes in the available technology, cost of technology, and optimal network profile resulting from those changes, costs of providing services may vary); and
- the output factor (due to the existence of economies of scale, the unit cost will change with the output).

The adjustment factor for PSTN O/T conveyance cost and ULLS charge could then be calculated as follows:

Adjustment Factor = 1 + CPI + technology factor + output factor

In addition to the questions posed in the Commission's undertaking discussion paper identified above, the Commission is interested in the views of interested parties on how it should calculate the technology factor and the output factor for the purpose of calculating adjustment factor PSTN O/T conveyance cost and ULLS adjustment factors.

The ADC adjustment factor

In its Future Pricing Principles paper[21], the Commission outlined three alternative approaches to calculating the ADC adjustment factor (should the Commission find there is a continuing need to include an ADC in any indicative price).

The Commission is interested in the industry view on either of the three alternative approaches to calculating the ADC proposed, or any alternative to those approaches.

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20 *Ibid*, pp 20-24.

21 Refer to ACCC, *Future Access Pricing Approaches for PSTN, ULLS and LCS, Discussion Paper*, September 2002.

Pricing of LCS

With respect to the indicative pricing of the LCS, the Commission considers there are two general approaches to calculating indicative prices that could be utilised:

- Continuous use of a retail-minus retail costs methodology to re-calculate prices on a yearly basis with the use of Regulatory Accounting Framework (RAF) information to calculate retail costs.

- Use of a Retail-minus retail costs methodology to calculate a base set of retail costs as a initial starting point to which an adjustment factor can be applied to estimate retail costs going forward.

Both approaches would provide the indicative retail costs for a relevant regulatory period, which could be used along with the retail price of local calls to calculate the wholesale LCS rate under the Retail-minus pricing methodology.[22] The Commission has previously noted that its preferred approach for calculating indicative prices for LCS would involve the use of an adjustment factor applied to retail costs that could then be used to estimate a three-year price path.

Some other specific issues concerning the pricing of the LCS which the Commission regards as relevant to its pricing considerations are detailed in the Commission's undertakings discussion paper.[23]

One of the key issues in the pricing of the LCS is the use of the retail minus retail cost methodology for determining the LCS price to be paid by access seekers. This approach recognises the possibility that the TSLRIC, including an access deficit contribution, of a local call may be greater than 20 cents per call. The Commission has chosen to adopt this methodology in order to ensure compatibility between the LCS price charged to access seekers and the prices that Telstra charges at a retail level, which need to be within the retail price controls faced by Telstra that prevent it from charging any more than 20 cents (or 22 cents including GST) for a retail local call.

An important variable under the retail minus methodology is the issue of retail staring price. In its use of the retail minus approach, the Commission has considered it appropriate to use Telstra's 'unbundled' retail local call service offerings as a basis for subtracting retail costs to determine suitable LCS prices. The Commission has recognised however, that Telstra could price squeeze its access competitors by increasing its unbundled local call prices relative to its bundled local call prices without any corresponding increases in the prices of other services in its bundled offerings.

In fact, in recent periods, the Commission has received a number of complaints regarding possible price squeeze behaviour. Consistent with the Commission's intentions to monitor the market and review its approach in the light of any such behaviour, as indicated in its April 2002 pricing principles paper, the Commission

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[22] Refer to ACCC, *Future Access Pricing Approaches for PSTN, ULLS and LCS, Discussion Paper*, September 2002, pp.19-21.

[23] Refer to ACCC, *Telstra's Undertaking for Domestic PSTN Originating and Terminating Access, Unconditioned Local Loop Service and Local Carriage Service – Discussion Paper*, March 2003, pp. 25-27.

proposes to look more closely at this aspect as part of its assessment of LCS pricing principles.

Another key issue in the pricing of the LCS is the calculation of retail costs. In calculating the LCS price, the Commission's has stated that it intends to make a new estimate of Telstra's retail costs for local calls and basic access using Telstra's 2001-02 Regulatory Accounting Framework (RAF) accounts. The Commission expects that certain adjustments to these accounts may be required to, among other things, reallocate costs between wholesale and retail functions.

The Commission requests that interested parties respond specifically to the above issues which are set out in the undertaking paper, with any appropriate additions, for the purpose of submitting responses to this discussion paper.

Re-calculation of retail costs using an adjustment factor

The use of an adjustment factor applied to Telstra's retail costs going forward to calculate LCS prices using a retail-minus retail costs methodology can be represented by the following simple formula:

$$\text{LCS price}_t = \text{Retail price}_t - \text{Retail costs}_t$$

With:

$$\text{Retail costs}_t = RC_{t-1}\,(1 + CPI_{t-1} - TFP_{t-1})$$

RC_{t-1} is the retail costs calculation for the previous period to which the adjustment factor is applied.

To calculate the adjustment factor applied to the retail costs starting point, the following factors need to be considered:

- the change in the CPI; and
- the growth in Total Factor Productivity (TFP).

The appropriate change in the CPI is that which eventuated over the previous regulatory period and is relatively simple to obtain.

The TFP component can be used to represent the estimated efficiency gains in Telstra's retail LCS operations.

In addition to the questions posed in the Commission's undertaking discussion paper identified above, the Commission is interested in the views of interested parties on what form of a TFP measure should be used for the purpose of calculating an adjustment factor.