



Australian
Competition &
Consumer
Commission

Unconditioned Local Loop Service

Access Dispute

Between

Telstra Corporation Limited (access provider)

and

PowerTel Ltd (access seeker)

Statement of Reasons for Final Determination

March 2008



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Summary

The Australian Competition and Consumer Commission (“ACCC”) has determined certain of the terms on which Telstra Corporation Limited (“Telstra”) supplies the Unconditioned LocalLoop Service (“ULLS”) to PowerTel Ltd (“PowerTel”). This determination specifies the ULLS monthly charges (also known as annual charges), ULLS single connection charges and ULLS managed network migration (“MNM”) connection charges payable by PowerTel to Telstra. This follows the parties being unable to agree on those terms and PowerTel notifying the dispute for ACCC arbitration.

The ACCC has specified ULLS monthly charges on a per service per month basis for Band 1, 2 and 3. The specified charges have been backdated to apply from 20 January 2006 to 30 June 2008. The specified charges are:

Band	2005-06	2006-07	2007-08
1	\$ 5.60	\$ 6.00	\$ 6.20
2	\$ 12.30	\$ 13.70	\$ 14.30
3	\$ 25.00	\$ 27.30	\$ 28.50

The charges result from applying the ACCC’s pricing principles for the ULLS and the ruling of the Australian Competition Tribunal (“Tribunal”).¹

Telstra proposed in previous regulatory proceedings an ULLS annual charge of \$30 per service per month across all geographical bands. This was opposed by access seekers and considered not to be reasonable by both the ACCC (25 August 2006) and the Tribunal (17 May 2007). Following these rulings, Telstra continued to require access seekers to pay a \$30 per service per month charge across all geographical bands.

A key issue in this arbitration is whether the ULLS annual charges payable by PowerTel should be averaged across all geographical bands or deaveraged. The ACCC determined that prices should be geographically deaveraged.

The determination also specifies backdated ULLS single connection charges payable by PowerTel. For 2007-08, the determination specifies a ULLS single connection charge of \$52.80 in Band 2.

The ACCC has specified ULLS MNM charges on a two-part tariff basis, whereby back-of-house costs are recovered in a fixed component and other costs are recovered in a variable per service component. The specified charges for the 2007-08 financial

¹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007).

year are:

Component	Charge
– Fixed amount	\$135.60 (per MNM)
– Variable amount	+ \$24.90 (per connection)

1. Introduction

1.1 Purpose

1. PowerTel and Telstra have been in dispute over annual charges, single connection charges and MNM connection charges for the supply of the ULLS. This dispute was notified to the ACCC for arbitration on 23 May 2006. The ACCC has made a final determination in this arbitration. This document sets out the reasons for making this final determination.

1.2 Background to arbitration and final determination

2. On 23 May 2006, PowerTel notified the ACCC under Part XIC of the TPA of an access dispute with Telstra, regarding the annual charges, single connection charges and MNM connection charges for the supply of the ULLS.
3. On 30 June 2006 and 13 July 2006, the ACCC requested the parties' views on preliminary issues and a draft interim determination on annual charges. It considered written submissions from the parties received on 21, 24 and 28 July.
4. On 17 August 2006, the ACCC issued an interim determination on ULLS annual charges.
5. On 1 August 2006, the ACCC requested the parties' views on whether it should consider making an interim determination on ULLS connection charges. It considered written submissions from the parties which were received on 3 August 2006.
6. On 5 October 2006 and 14 November 2006, the ACCC requested the parties' views on a draft interim determination on connection charges. It considered written submissions from the parties which were received on 20, 27 and 30 October 2006 and on 21, 23 and 29 November 2006.
7. On 18 December 2006, the ACCC revoked the interim determination made on 17 August 2006 and made a further interim determination on ULLS annual charges and connection charges.
8. On 13 August 2007, the ACCC decided to extend the period of operation of the interim determination made on 18 December 2006 until 21 December 2007.
9. On 22 December 2006, the ACCC commenced consultations on the making of a final determination.
10. The parties remained unable to resolve the dispute. The terms of access for consideration in this final determination are the annual charges, single connection

charges and MNM connection charges for the supply of the ULLS

11. The ACCC notes that PowerTel and Request are related entities which both notified their disputes on the same day and that their submissions provided during the course of the respective arbitrations have been jointly provided and wholly identical. Accordingly, submissions are identified in this statement of reasons as the submissions of PowerTel and Request.

1.3 Consultation Process

12. On 22 December 2006, the ACCC commenced consultations on the making of a final determination.
13. On several occasions the ACCC sought the parties' submissions on various procedural matters (22 December 2006, 2 and 26 February 2007 and 5 April 2007). Submissions from parties were received on 25 January 2007, 1, 2 and 27 February 2007, 2, 9 and 19 March 2007, 20 April 2007, 8 May 2007 and 6 and 13 July 2007. The ACCC provided its views to parties on the procedural matters on 5 April 2007, 29 May 2007, 19 June 2007, 29 June 2007 and 18 July 2007.
14. Other access disputes have been notified in respect of the ULLS and there is overlap in the terms of access that are disputed. After seeking the parties' views, the ACCC held a joint arbitration hearing to consider the terms of access that were commonly disputed in eight ULLS access disputes (Chime Communications Pty Ltd ("Chime")/Telstra, Optus Networks Pty Limited ("Optus")/Telstra, XYZed Pty Limited ("XYZed") /Telstra, Primus Telecommunications Pty Ltd ("Primus")/Telstra (annual charges), Primus/Telstra (connection charges), PowerTel Ltd ("PowerTel")/Telstra, Request Broadband Pty Limited ("Request")/Telstra and Macquarie Telecom Pty Ltd ("Macquarie")/Telstra). The ACCC considered that holding a joint hearing on these matters was likely to result in the disputes being resolved in a more efficient and timely manner. As a result, these reasons for decision on occasion refer to submissions that were advanced by other ULLS access seekers in the joint hearing. As part of the joint arbitration hearing, access seekers received, and were able to consider and submit on, the submissions of other access seeker parties in relation to common issues. Terms of access that were disputed in only a single arbitration were dealt with in a separate hearing involving the relevant parties to that arbitration.
15. On 28 June 2007, the ACCC provided to the parties a draft final determination ("DFD") and an accompanying consultation paper, to assist the parties in providing their submissions. The draft final determination reflected the ACCC's preliminary views pending consideration of the parties' submissions.
16. Following requests from Telstra on 26 July 2007 and 24 August 2007, the timetable for parties' submissions was extended to 16 August 2007 (for principal submissions) and 13 September 2007 (for response submissions). Telstra also provided supporting CDs of material in support of its submissions. The number of CDs varied depending on the number of issues in dispute for each access seeker. The CDs included supporting reports, witness statements, annexures, cost models and other data in

support of its submissions. Optus similarly provided supporting CDs of documents.

17. Following its provision of its initial submissions, Telstra provided certain amendments to its submissions on 28 August 2007 and 6 September 2007. On 31 August 2007, Telstra provided a missing document from its supporting material. On 6 December 2007, the ACCC contacted Telstra about a reference to a document in its supporting material that had not been provided to the ACCC. On 7 December 2007, Telstra provided the document to the ACCC. On 13 December 2007, Telstra provided the document to access seekers.
18. Telstra subsequently made further submissions:
 - on 17 October 2007, Telstra provided responses to the reply submissions of access seekers
 - on 26 October 2007, Telstra submitted a report titled “Access regulation and infrastructure investment in the telecommunications sector: an empirical investigation” by LECG Ltd from September 2007, and requested that the ACCC have regard to the report
 - on 31 October 2007, Telstra submitted that the ACCC should have regard to a range of US cases in support of its arguments relating to averaged ULLS prices
 - on 12 November 2007, Telstra submitted that the ACCC’s High Court submissions supported prices not being set in Optus’ HFC network footprint.
 - on 21 December 2007, Telstra submitted that the ACCC should not determine prices for MNM connections in this dispute because Telstra and PowerTel/Request are not “unable to agree” on the terms and conditions of access with respect to MNM connections.
19. On 17 August 2007, Telstra made a confidentiality request over some of the information it submitted in its initial submissions. On 22 August 2007, the ACCC consulted with access seekers about Telstra’s confidentiality request. On 23 and 24 August 2007 access seekers sought access to the information. On 28 August 2007, the ACCC consulted with Telstra in accordance with section 152DK of the TPA. On 13 September 2007, the ACCC provided its views on the information subject to the confidentiality request.
20. On 22 October 2007, in a separate process, the ACCC sought public comments on its draft ULLS pricing principles.
21. On 22 November 2007, the ACCC issued final ULLS pricing principles in that separate process.
22. On 27 November 2007, the ACCC sought further submissions from parties regarding the application of the final ULLS pricing principles to the ULLS final determination, Telstra’s Current Cost Accounting (CCA) data and Telstra’s ability to recover the costs of serving rural areas. The ACCC received the parties’ submissions on 5, 7 and

10 December 2007.

23. On 17 December 2007, Telstra wrote to the ACCC submitting that the final determinations should be deferred to allow consideration of Telstra's pending TEA network cost model. In response, on 20 December 2007, the ACCC wrote to Telstra stating that it did not seek further submissions from parties prior to its consideration of a final determination in these disputes.
24. On 19 December 2007, Telstra wrote to the ACCC seeking confirmation as to whether the ACCC would interpret the statutory criteria consistently with how it proposed in the consultation paper, and whether it would consult the parties on matters relating to 'just terms'. On 19 December 2007, Telstra again wrote to the ACCC on 19 December 2007 to reiterate its previously expressed view that different terms of access should be set for ULLS supplied within the footprint of the Optus Hybrid Fibre Coaxial (HFC) network. Telstra enclosed a submission dated 17 December 2007 relating to an application Telstra had made for an exemption from standard access obligations in the Optus HFC footprint, and statements from Michael G Harris and Professor Martin Cave.
25. On 21 December 2007, Telstra provided its TEA model in the context of the arbitrations and made a section 152DK confidentiality request in relation to the TEA model. The ACCC consulted with access seekers about Telstra's request. On 3 January 2008, access seekers responded stating that they had no objection to Telstra's request so long as the TEA model was not to be considered in these arbitrations. Access seekers further considered that it would not be appropriate to delay the final determinations to consider the TEA model. Having considered the submissions of Telstra and access seekers, and the ACCC's position in relation to the TEA model, on 18 January 2008 the ACCC agreed to Telstra's section 152DK request.
26. On 23 January 2008, the ACCC received from its consultant, Paul Brooks of Layer 10 Pty Ltd, a finalised report on ULLS connection charges. As the report reached certain limited conclusions that the parties had not had the opportunity to comment on previously, the ACCC provided the finalised report to the parties for comment on 31 January 2008. Following requests from Telstra on 5 February 2008, the ACCC on 6 February 2008 extended the timetable for the parties' submissions to 12 February 2008. The ACCC also responded to Telstra's inquiry as to why the ACCC was not having regard to the TEA model given the consultation on the finalised Layer 10 report. The parties provided submissions by 12 February 2008 and Telstra also provided a revised witness statement in response to the finalised Layer 10 report on 26 February 2008.
27. On 22 February 2008, Telstra provided a submission on Optus' use of the ULLS.
28. In addition to correspondence and submissions set out above, there was correspondence relating to matters, other than monthly charges, single connection charges and MNM connection charges, which were also being considered as part of the joint arbitration hearing.

2. Preliminary Matters

2.1 The Unconditioned Local Loop Service (“ULLS”)

29. The ULLS allows access seekers to gain access to the unconditioned cable (typically a copper pair) between an end-user customer and a telephone exchange. The ULLS essentially gives an access seeker the use of the entire copper pair, without any functionality provided by Telstra. The access seeker can use the line in conjunction with its own equipment in the exchange to provide a range of services, including traditional voice services and high-speed xDSL broadband internet access.
30. The ULLS is a declared service. The ACCC first declared the ULLS in August 1999, pursuant to subsection 152AL(3) of the TPA.² The ACCC continued the declaration of the ULLS in July 2006 for a further three years.³ Copies of the declarations were published in the *Commonwealth of Australia Gazette*.⁴
31. The ACCC has made final pricing principles for the declared ULLS pursuant to section 152AQA of the TPA.⁵ These pricing principles follow earlier pricing principles that the ACCC specified for the ULLS in 2002 and which it re-affirmed in its model prices determination in 2003.⁶

2.2 Access obligations and existence of dispute relating to access

32. The ACCC sought the parties’ views on whether access obligations are owed and whether a dispute exists in relation to access.

Submissions from parties

33. Telstra submits that the ACCC has no jurisdiction to conduct arbitrations on the basis that Part XIC of the TPA is invalid. Subject to this claim, Telstra acknowledges that access obligations would otherwise exist and that there is a dispute between it and the access seekers to the joint arbitration, which relates to access to the ULLS.⁷

² ACCC, *Declaration of local telecommunications services*, July 1999.

³ ACCC, *Declaration inquiry for the ULLS, PSTN OTA and CLLS – final determination*, July 2006.

⁴ *Commonwealth of Australia Gazette*, GN32, 11 August 1999, pp. 2440-2422; GN31, 9 August 2006, pp. 1982-1983.

⁵ ACCC, *Unconditioned Local Loop Service (ULLS) – Final Pricing Principles – November 2007*.

⁶ ACCC, *Pricing for unconditioned local loop services – final report, March 2002, Chapter 4*; ACCC, *Final determination for model price terms and conditions for the PSTN, ULLS and LCS services*, October 2003. See also *Declaration inquiry for the ULLS, PSTN OTA and CLLS – final determination*, July 2006, Chapter 7.

⁷ Telstra, *Submissions of Telstra Corporation Limited (“Telstra”), Unconditioned Local Loop Service (“ULLS”), Part 2 – Preliminary Matters and General Approach*, 16 August 2007, p. 9.

34. In its letter of 21 December 2007, Telstra submits that the ACCC should not determine prices for MNM connections in this access dispute because Telstra and PowerTel/Request are not “unable to agree” on the terms and conditions of access with respect to MNM connections.⁸ Telstra contends that the access dispute regarding MNM connections has not been validly notified because:⁹
- prior to notifying the access dispute including MNMs as an issue in dispute, PowerTel and Request had not approached Telstra about this issue nor had they asked Telstra to supply MNM connections and
 - since notifying the access dispute, PowerTel and Request have not asked Telstra to supply MNM connections.
35. PowerTel and Request submit that the standard access obligations (“SAOs”) pursuant to section 152AR of the TPA apply in this arbitration and that there remains a dispute relating to access to the declared ULLS as between PowerTel and Telstra and Request and Telstra.¹⁰

ACCC’s view

36. The ACCC has formed the view that, with respect to the access dispute, the requirements of subsection 152CM(1) of the TPA are satisfied. That is:
- Telstra is a carrier
 - Telstra supplies the declared ULLS
 - Telstra has an obligation under subsection 152AR(3) of the TPA to supply the ULLS to the access seeker and
 - The access seeker is unable to agree with Telstra about the terms and conditions of access to the ULLS addressed in the final determination.
37. The ACCC has previously determined that Telstra and PowerTel, and Telstra and Request, are unable to agree on MNM connection charges and that this issue has been validly notified as an issue in dispute. The ACCC notes that both Telstra and PowerTel/Request have proceeded on the basis that MNM connection charges are a valid issue in dispute.¹¹ Further, the ACCC addressed MNM connection charges in

⁸ Telstra, *Access disputes – PowerTel, Request, and Telstra – ULLS*, 21 December 2007.

⁹ Ibid.

¹⁰ PowerTel and Request, *Unconditioned Local Loop Service, Submissions of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 16 August 2007, p. 3.

¹¹ Telstra, *Telstra – PowerTel Access Dispute – Submission on next steps*, 25 January 2007, p. 4.

the interim determinations it made on 18 December 2006.¹² The ACCC has included MNM connection charges in the final determination in this dispute.

2.3 Whether the Commission has jurisdiction to arbitrate the access dispute

38. Telstra disputes that the ACCC has jurisdiction to conduct the arbitration and reiterates that its participation in the arbitration should not be taken as a concession that the ACCC has jurisdiction. Telstra refers to proceedings it commenced in the High Court of Australia in which Telstra contends that Part XIC of the TPA is beyond the legislative power of the Commonwealth and invalid.¹³ On this basis, Telstra maintains that the ACCC has no power or jurisdiction to entertain these disputes.¹⁴
39. The ACCC is of the view that it was appropriate for it to proceed to make a final determination in this arbitration. As previously advised to the parties on 2 February 2007, the ACCC considers that it is entitled to proceed on the basis that the legislation is validly enacted. Further, the ACCC considered that the consequences of suspending the arbitration (including the impact delays would be likely to have on end-users) make it inappropriate not to proceed on the basis that Telstra has commenced proceedings challenging the validity of relevant legislative provisions.
40. On 6 March 2008, the High Court made a decision in relation to Telstra's proceedings. The High Court rejected Telstra's arguments. It held that Part XIC of the TPA was not beyond the legislative power of the Commonwealth and was valid.

2.4 Whether to proceed to make a final determination

41. Telstra submits that in order for the ACCC to fulfil its obligations under the TPA to conduct a proper arbitration hearing, the ACCC should convene an oral hearing.¹⁵
42. The ACCC is satisfied as to how the arbitration has been conducted. Any question of how an arbitration is to be conducted is for the ACCC to determine (see subsections 152DB(3) and (4)).
43. The ACCC does not consider that it is necessary to conduct an oral hearing. It considers that it has fulfilled its obligations to conduct a proper arbitration hearing by conducting the hearing on the papers. As previously advised to the parties on 5 April 2007, ULLS annual charges have been the subject of public consultation processes

¹² ACCC, *Access dispute between PowerTel Ltd (Access Seeker) and Telstra Corporation Limited (Access Provider), Unconditioned Local Loop Service (ULLS), Revocation and making of an Interim Determination under Section 152CPA of the Trade Practices Act 1974*, 18 December 2006.

¹³ High Court of Australia, proceedings S. 42 of 2007.

¹⁴ Telstra, above n 7, p. 9.

¹⁵ Telstra, *Reply Submissions of Telstra Corporation Limited ("Telstra"), Unconditioned local loop service ("ULLS"), Part 1 – Preliminary matters and general approach*, p. 4.

before the ACCC and have been considered by the Tribunal.

44. In coming to this view the ACCC has also had regard to the experience of the parties in arbitrations, the time allowed for the provision of written submissions (including submissions in reply) on relevant issues, and the manner in which the ACCC sought and obtained information relating to its decision. The ACCC is satisfied that an oral hearing is not required on any matters.
45. The ACCC is of the view that it has conducted the arbitrations properly and has satisfied the relevant procedural fairness requirements in reaching a final determination in this dispute. The ACCC considers that conducting an oral hearing in these matters is unnecessary for the parties to put their case and would not bring a material benefit to the ACCC's decision-making. As the ACCC has previously advised on 5 April 2007, requiring the parties to prepare for and participate in an oral hearing would add considerable delay and expense to the parties and the ACCC. The ACCC has conducted a number of inquiries regarding the ULLS leading up to and following the original declaration of the ULLS in 1999, and is well acquainted with the issues that have been raised by the parties in their written submissions in the current arbitration. The ACCC has accordingly conducted these hearings on the papers.

3. General approach

3.1 Use of pricing principles

Introduction

46. The ACCC has determined final pricing principles for the ULLS under section 152AQA of the TPA. This determination, as well as reasons for making it, is contained in ACCC, *Unconditioned Local Loop Service (ULLS) – Final pricing principles – November 2007* and reflects the long-standing pricing principles adopted by the ACCC for the ULLS and other declared telecommunications services.¹⁶
47. The ACCC's final ULLS pricing principles are that:
- a Total Service Long Run Incremental Cost (plus a contribution to indirect cost) ("TSLRIC+") pricing principle should be applied to the ULLS
 - a specific cost component should be included in the ULLS monthly price, calculated by combining "ULLS-specific costs" with "LSS-specific costs" and Telstra's internal equivalent costs for ADSL and allocating those costs across the number of active ULLS, LSS and ADSL lines
 - the ULLS charges should be geographically de-averaged
 - connection charges should be set with reference to the amounts charged by third party contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.¹⁷
48. The ACCC is required to have regard to the ULLS pricing principles in determining prices to apply in respect of the ULLS.¹⁸ At 28 June 2007, the ACCC did not have finalised ULLS pricing principles. Accordingly, when it issued draft final determinations on 28 June 2007, the ACCC sought the parties' views on whether it should have regard to the draft ULLS pricing principles and the previous ULLS pricing principles. After deciding to make final ULLS pricing principles, on 27 November 2007 the ACCC sought the parties' views on the draft final determination in light of the finalised pricing principles.

Submissions from parties

¹⁶ See ACCC, above n 5; ACCC, *Access Pricing Principles – Telecommunications*, July 1997.

¹⁷ ACCC, above n 4.

¹⁸ Subsection 152AQA(6), *Trade Practices Act 1974*.

49. Telstra had stated that the ACCC must have regard to finalised pricing principles in order to make a final determination in the disputes.¹⁹ However Telstra stated that, in general, it did not object to the use of TSLRIC in setting ULLS prices.
50. Following the ACCC's finalisation of its ULLS pricing principles and consultation on those pricing principles, Telstra submits that although the ACCC must have regard to the ULLS pricing principles, it is not bound to apply those principles. Given the evidence before the ACCC, Telstra submits that the ACCC should not apply several aspects of the pricing principles.²⁰
51. Regarding the use of CCA data, Telstra submits that the ACCC's concerns set out in the ULLS pricing principles are not material in the current context. It submits that its Updated Top Down Model is an accurate calculation of the TSLRIC+ of providing the ULLS and is consistent with the statutory criteria. Therefore, Telstra contends that the ACCC should rely on this model in setting ULLS prices.²¹
52. Telstra submits that specific costs should be recovered from ULLS users only. Telstra further submits that while the ACCC has endorsed the principle of including indirect capital costs when using a TSLRIC+ approach, it has failed to include a contribution to indirect capital costs in its calculation of several specific costs for ULLS.²²
53. Further, Telstra submits that the ULLS access prices should be averaged.²³
54. Telstra also expressed its views on the ACCC's discussion of investment levels, price setting and connection charges in its final ULLS pricing principles.²⁴
55. Access seekers are generally in agreement with the approach adopted in the final pricing principles.²⁵ Chime and Primus state that they agree with the ACCC's view expressed in the pricing principles that connection charges should be set with reference to third-party contractor costs.²⁶ Optus considers it appropriate to set access

¹⁹ Telstra, above n 7, p. 11.

²⁰ Telstra, *Access disputes – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra – ULLS*, 10 December 2007, p. 1.

²¹ Telstra, *op cit*, pp. 1-6.

²² Telstra, *op cit*, pp. 6-7.

²³ Telstra, *op cit*, pp. 7-8.

²⁴ Telstra, *op cit*, pp. 8-10.

²⁵ Chime, *Unconditioned local loop service (ULLS), Submission of Chime Communications Pty Ltd (Chime) regarding supplementary consultation paper on draft final determinations*, 10 December 2007, p. 1; Primus, *Unconditioned local loop service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus) regarding supplementary consultation paper on draft final determinations*, 10 December 2007, p. 1; Optus, *Telecommunications Access Dispute: Telstra ULLS disputes – Consultation on Pricing Principles and related issues*, 5 December 2007, p. 1; PowerTel and Request, *PowerTel Ltd ("PowerTel") – Telstra Corporation Limited ("Telstra"): ULLS access dispute, Request Broadband Pty Ltd ("Request") – Telstra: ULLS access dispute*, 10 December 2007, pp. 1-3; Macquarie, *Unconditioned local loop service (ULLS), Submission of Macquarie Telecom Pty Ltd*, 10 December 2007, pp. 1-3.

²⁶ Chime, above n 25, p. 1; Primus, above n 25, p. 1.

prices based on TSLRIC but considers that care should be taken in how the TSLRIC cost measure is implemented. Optus also emphasises that the ACCC should ensure that prices are only set to enable Telstra to recover efficiently incurred costs.²⁷ PowerTel and Request submit that the ACCC ought to continue to apply the TSLRIC+ pricing methodology in these arbitrations.²⁸

ACCC's views

56. The ACCC is required to have regard to the ULLS pricing principles in an arbitration and considers that it should in this arbitration determine access prices for the ULLS in accordance with those principles. The ULLS pricing principles require that ULLS access prices reflect the TSLRIC+ of providing access to the ULLS.
57. The parties generally agree on the use of a TSLRIC methodology. A detailed discussion of the TSLRIC+ methodology can be found in ACCC, *Access Pricing Principles – Telecommunications - a guide*, 1997.
58. The Tribunal expressed its general agreement with the ACCC's approach to applying the long term interests of end-users ("LTIE") test and its use of TSLRIC pricing.²⁹ In the Tribunal's view, the key principles include:³⁰

The price of a service should not exceed the minimum costs that an efficient firm will incur in the long-run in providing the service.

The costs are the forward-looking costs, including a normal return on efficient investment (which takes into account the risk involved).

Forward-looking means prospective costs using best-in-use technology. The access provider should only be compensated for the costs it would incur if it were using this technology, not what it actually incurs, for example in using out-of-date technology which is more costly. Of course, a firm may be using older technology because it was the best available at the time the investment was made and replacing it cannot be justified commercially. In a competitive market, however, that firm would only be able to charge on the basis of using the most up-to-date technology because, if it did not (in this hypothetical competitive market) access seekers would simply take the service from an alternative service provider.

The cost of providing the service should be the cost that would be avoided in the long-run by not having to provide it. Thus, it is the additional or incremental costs necessarily incurred, assuming other production activities

²⁷ Optus, above n 25, pp. 1-3.

²⁸ PowerTel and Request, above n 25, pp. 1-3.

²⁹ See ACCC, *Access Pricing Principles, Telecommunications – a guide (Access Pricing Principles Guidelines)*, July 1997.

³⁰ *Seven Network Limited (No 4)* [2004] ACompT 11 at [135].

remain unchanged.

59. Further, the Tribunal noted that:³¹

...in the general case where access prices need to be regulated, unless pricing is on a TSLRIC basis, efficient investment is unlikely to be encouraged.

60. The ACCC notes that the Tribunal went on to state that:³²

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

61. Similarly, the Tribunal has stated that a proper application of the criteria relevant to the assessment of an access undertaking (and which significantly overlap with the subsection 152CR(1) criteria) would require that prices reflect the efficient costs of providing access:³³

...we would point out that whenever an access provider seeks approval of an access undertaking from the Commission which involves a consideration of a price term by comparing it with costs, it would be necessary, in order to satisfy the statutory framework, that the access provider establish that its costs are efficient costs.

62. Access seekers generally do not object to TSLRIC being implemented in accordance with the ULLS pricing principles.

63. The ACCC has taken into account the finalised ULLS pricing principles. The ACCC considers that in accordance with these pricing principles it should in this arbitration determine monthly access prices for the ULLS that:

- reflect the TSLRIC+ of providing access to the ULLS and
- include a specific cost component, calculated by combining ‘ULLS-specific costs’ with ‘LSS-specific costs’ and Telstra’s internal equivalent costs for ADSL and allocating those costs across the number of active ULLS, LSS and ADSL lines

³¹ *Seven Network Limited (No 4)* [2004] ACompT 11 at [136].

³² *Seven Network Limited (No 4)* [2004] ACompT 11 at [137].

³³ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [46].

- are geographically de-averaged.³⁴

64. The ACCC has conducted significant analysis on these issues in previous processes under Part XIC. The ACCC considered both the geographic averaging of ULLS prices and the appropriate recovery of specific costs in its decision to reject Telstra's December 2005 ULLS undertaking.³⁵ The Tribunal also discussed in some detail the merits of geographically averaged ULLS pricing and the appropriate recovery of specific costs in its decision to uphold the ACCC's view on that undertaking.³⁶
65. The purpose of ULLS pricing principles is to inform parties of the likely approach that will be adopted by the ACCC in setting prices in arbitrations. However, pricing principles are not the only means by which the ACCC can communicate this to interested parties. The ACCC can also publish reasons for decision in undertaking assessments or in arbitrations that provide further detail regarding currently held views on relevant matters. Where such guidance has been provided in subsequently published decisions, the ACCC considers that it should have regard to those decisions in interpreting the ULLS pricing principles. The ACCC sought submissions from parties in its consultation paper concerning the relevance of previous ACCC decisions.
66. The ACCC notes that Telstra objects to the ACCC applying several aspects of the pricing principles, including geographic de-averaging, the appropriate recovery of specific costs and the setting of prices in Optus' HFC footprint. The ACCC discusses Telstra's objections later in these reasons.

3.2 International Benchmarks

67. Telstra submits that when population density is taken into account, the average of the ACCC's published ULLS prices is low relative to international prices. Telstra contends that this is inconsistent with the LTIE.³⁷
68. In general, the ACCC considers that international benchmarking should be used cautiously in informing regulatory pricing decisions. In particular, before international benchmarks might be useful, the ACCC would need to be satisfied that, the difference between Australia and the relevant international jurisdictions notwithstanding, the international benchmarks are reasonable comparators. Relevant differences may include matters such as the definition of the regulated service, the applicable regulatory framework, the geographic price structure, the cost of capital, the prescribed cost standard (if any) and population concentration and distribution (as

³⁴ ACCC, above n 5, pp. 17-22.

³⁵ ACCC, *Assessment of Telstra's ULLS monthly charges undertaking – final decision*, August 2006, Appendix C and E.

³⁶ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [53] to [291], [387] to [414].

³⁷ Telstra, *Submissions of Telstra Corporation Limited ("Telstra"), Unconditioned local loop service ("ULLS"), Part 1: Overview*, pp. 6-7.

opposed to population density).

69. Accordingly, the ACCC considers that international benchmarks are often of limited informative value and therefore the ACCC does not consider international benchmarks are particularly relevant in its determination of ULLS prices.
70. These factors notwithstanding, the ACCC considers that the ULLS prices it has published are well within the range of prices being charged in Europe for the ULLS.³⁸ The ACCC further considers international benchmarks later in these reasons.

3.3 Relevant legislation

Introduction

71. The ACCC sought the parties' views on what they consider to be sections of the TPA that are relevant to the ACCC's making of a final determination.

Submissions from parties

72. The parties identify Part XIC of the TPA, predominantly Division 8 of this Part, as relevant to the making of the final determination.

The ACCC's role and task

73. Telstra has made submissions about the ACCC's role under Part XIC and the processes that the ACCC adopted in conducting this arbitration. In particular, Telstra draws attention to section 152DB of the TPA and submits that this provision obliges the ACCC to provide the parties with a proper opportunity to be heard after it has carried out all proper enquiries and investigations. Telstra submits that the draft final determination ("DFD") in this dispute "constitutes a denial of procedural fairness" for a number of reasons, namely:³⁹
- a DFD should only be made after receiving substantive submissions from parties
 - the DFD is tainted by a denial of a proper hearing and/or prejudgement because the DFD is based on prior conclusions of the ACCC rather than parties' submissions in these arbitrations and
 - the ACCC has not carried out its subsection 152DB(1) function of carefully inquiring and investigating the dispute because the ACCC has not called for and considered substantive submissions from the parties prior to issuing its

³⁸ Commission of the European Communities, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, European Electronic Communications Regulation and Markets 2006 (12th Report)*, 29 March 2007, pp. 72-76, Annex 2.

³⁹ Telstra, above n 7, pp. 15-16.

DFD.

74. Telstra suggests that the DFD's failure to meet the requirements of procedural fairness pursuant to subsections 152DB(1) and 152CP(4) could be cured prior to any final determination being made by the ACCC if the ACCC:⁴⁰
- provide a further DFD informed by the parties' submissions (again with consultation paper and reasons) for the parties' review and
 - calls for further submissions from the parties in relation to that further DFD.
75. Access seekers submit that they are satisfied that the ACCC has met its obligations and acted appropriately in conducting the arbitration.
76. Chime and Primus oppose Telstra's proposal that the ACCC undertake extensive additional enquiries and then issue a further DFD for comment by the parties. They consider that this would only prolong the dispute and would be contrary to the ACCC's obligations under paragraph 152DC(1)(f) of the TPA to do all such things as are necessary or expedient for the speedy hearing and determination of the access dispute.⁴¹ PowerTel and Request submit that they consider the ACCC has met its obligations under the Act.⁴² Macquarie states that it does not support Telstra's allegations concerning the way in which the ACCC has carried out its role as an arbitrator.⁴³

Legislative Instruments Act 2003 (Cth)

77. Telstra contends that the ULLS declaration is a legislative instrument for the purpose of section 5 of the *Legislative Instruments Act 2003 (Cth)* ("the LI Act") and must be registered pursuant to section 31 of the LI Act to be enforceable. As it has not been registered, Telstra contends that the ULLS declaration is unenforceable; rendering the arbitration process to date invalid.⁴⁴

Utilities (Network Facilities Tax) Act 2006 (ACT)

78. Telstra submits that the *Utilities (Network Facilities Tax) Act 2006 (ACT)* ("the Utilities Act") and any legislation of a similar purpose that may be passed in the

⁴⁰ Telstra, *op cit*, pp. 15-18.

⁴¹ Chime, *Unconditioned local loop service (ULLS), Reply submission of Chime Communications Pty Ltd (Chime), Part 1 – Preliminary Matters and General Approach*, 13 September 2007, p. 2; Primus, *Unconditioned local loop service (ULLS), Response to Part 2 of Telstra's Submission – Preliminary matters and general approach*, 13 September 2007, p. 2.

⁴² PowerTel and Request, *Unconditioned local loop service—submissions in reply of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 13 September 2007, p. 14-16.

⁴³ Macquarie, *Unconditioned Local Loop Service (ULLS)—submissions of Macquarie Telecom in response to Telstra submission*, 13 September 2007, p. 3.

⁴⁴ Telstra, *Reply submission of Telstra Corporation Limited ("Telstra"), Unconditioned Local loop Service ("ULLS"), Part 2 – ULLS Monthly Charges*, 13 September 2007, p. 5.

future in other states, is also relevant to the final determination. It states that the tax imposed would affect the costs of the network infrastructure which are incurred by any access provider, including a provider of ULLS.⁴⁵ The *Taxation Administration (Amounts payable – Utilities (Network Facilities Tax)) Determination 2006 (No 1)* sets the amount of tax payable under the Utilities Act at \$355 per kilometre of network route length. Telstra notes that it paid an infrastructure tax of [c-i-c] on [c-i-c] 31 May 2007.⁴⁶ Telstra submits that this should not be the subject of the determination. Rather, the ACCC should expressly exclude it from the monthly price to enable the parties to negotiate on how to appropriately recover this cost.⁴⁷ Telstra suggests that the ACCC include the following Schedule 1 to the final determination:⁴⁸

This determination does not include any amount which Telstra may levy in order to recover tax paid by Telstra pursuant to the Utilities (Network Facilities Tax) Act 2006 (ACT) or any other tax, duty, levy, charge or impost (whether existing at the time that this determination is made or coming into effect at a later time) in relation to Telstra's infrastructure or facility.

ACCC's views

79. The ACCC considers that Part XIC of the TPA is relevant to the making of the final determination. The ACCC considers that the following sections are of direct relevance to the making of a final determination:
- Subsection 152CP(1) of the TPA, which provides that unless the ACCC terminates the arbitration, the ACCC must make a written determination on access by the access seeker to the declared service.
 - Subsection 152CP(2) of the TPA, which provides that the determination may deal with any matter relating to access by the access seeker to the declared service, including matters that were not the basis for notification of the dispute.
 - Subsection 152CP(4) of the TPA, which requires that before making a determination, the ACCC must give a draft determination to the parties.
 - Subsection 152CP(5) of the TPA, which requires that when the ACCC makes a determination it must give the parties to the arbitration its reasons for making the determination.
 - Section 152CQ of the TPA, which sets out restrictions on access determinations.

⁴⁵ Telstra, above n 7, p. 28.

⁴⁶ Telstra, *Submissions of Telstra Corporation Limited ("Telstra"), Unconditioned local loop service ("ULLS"), Part 3 – ULLS Monthly charges*, 16 August 2007, pp. 50-51.

⁴⁷ Telstra, above n 7, p. 3.

⁴⁸ Telstra, above n 46, p. 51.

- Subsection 152CR(1) of the TPA, which requires that in making a final determination, the ACCC must take certain matters into account, including the long-term interests of end-users, which is defined in section 152AB of the Act..
- Subsection 152CR(2) of the TPA, which provides that the ACCC may take into account any other matters that it thinks are relevant.
- Section 152DNA of the TPA, which concerns backdating and interest.
- Subsection 152AQA(6) of the TPA, which requires that the ACCC must have regard to a pricing principles determination (made in accordance with subsection 152AQA(1)) if the ACCC is required to arbitrate an access dispute under Division 8 in relation to the declared service.
- Subsection 152AQB(6) of the TPA, which requires that the ACCC must have regard to a model terms determination (made in accordance with subsection 152AQB(2)) if the ACCC is required to arbitrate an access dispute under Division 8 in relation to a core service.

The ACCC's role and task

80. The ACCC considers that the measures that it has taken in arbitrating this access dispute are in accordance with its obligations under Part XIC. With respect to Telstra's claim that the ACCC has denied it procedural fairness, the ACCC does not agree with this assertion. The requirements of section 152CP of the Act impose upon the ACCC an obligation to make a written determination (unless the arbitration has been terminated).
81. Subsection 152CP(4) requires the ACCC to provide parties with a draft determination before it makes a final determination. Accordingly, before any final determination is made, parties to the arbitration are given an opportunity to be heard on the content of the draft determination. In this case the parties were provided with consultation papers and specifically invited to comment on particular issues. Parties were also able to provide general submissions. The ACCC also provided a supplementary consultation paper seeking comments.
82. The ACCC notes that section 152DB of the Act also provides that the ACCC (in conducting an arbitration) is not bound by technicalities or the rules of evidence and may inform itself of any matter relevant to the dispute in any way it thinks appropriate. The ACCC is satisfied that it has taken into account all submissions received and that it is entitled to inform itself in any way it thinks appropriate. The DFD is a reflection of the ACCC's views at a certain point in time taking into account the submissions that the ACCC had received in respect of this access dispute. The issuing of the DFD is not a prejudgment of issues – it is a draft upon which parties are invited to make further submissions.
83. The consultation process followed is set out above in section 1 of this statement of reasons. The ACCC is satisfied that parties have been given a reasonable opportunity

to be heard on the issues in dispute in the arbitration.

84. Throughout the arbitration process, the ACCC has inquired where (in the ACCC's view) information was centrally relevant to the ULLS arbitration and the ACCC was able to readily obtain that material. Therefore, the ACCC considers it has made a proper investigation and inquiry into matters which it perceives are in dispute and fulfilled its role as an arbitrator.
85. Accordingly, the ACCC considers that it has conducted the arbitrations in this joint hearing in an unbiased manner, without prejudging any outcome and has satisfied procedural fairness requirements in reaching a final determination in this dispute.

Legislative Instruments Act 2003 (Cth)

86. The ACCC's view is that the ULLS declaration is not a legislative instrument for the purposes of the *Legislative Instruments Act 2003*, and therefore does not need to be registered in accordance with that Act. Accordingly, the ACCC does not consider that the ULLS declaration should be taken to be unenforceable.

Utilities (Network Facilities Tax) Act 2006 (ACT)

87. The ACCC considers that the *Utilities (Network Facilities Tax) Act 2006 (ACT)* could potentially be relevant to the setting of ULLS access prices, to the extent that Telstra is liable to a charge under that Act and that any such cost relates to Telstra's supply of the ULLS.
88. However, Telstra has not made a per line cost claim in respect of liabilities under the Act, but rather seeks the ability to require access seekers to make contributions to liabilities that accrue. The ACCC does not consider that this would be appropriate, as it denies access seekers certainty as to the charges that they face for using the ULLS and impedes competition and is unnecessary to ensure cost recovery. Accordingly, the ACCC has not specified in the final determination that liabilities under the Utilities Act should be passed-through.
89. This means that the contribution that may be appropriate for ULLS access seekers to make (if any) towards such liabilities that may arise remain a matter for the parties to negotiate. The final determination prices do not include any amount to account for the tax.
90. Further, the ACCC does not consider that it is necessary to make allowance for the possible introduction of other laws to which Telstra may become liable.

3.4 Subsection 152CR(1) criteria

Introduction

91. The ACCC must have regard to the criteria specified in subsection 152CR(1) of the TPA in making a final determination. These criteria are:

- (a) whether the determination will promote the LTIE of carriage services or of services supplied by means of carriage services;
- (b) the legitimate business interests of the carrier or provider and the carrier's or provider's investment in facilities used to supply the declared service;
- (c) the interests of all persons who have rights to use the declared service;
- (d) the direct costs of providing access to the declared service;
- (e) the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else;
- (f) the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility;
- (g) the economically efficient operation of a carriage service, a telecommunications network or a facility.

92. On 28 June 2007, the ACCC provided the parties with its preliminary views on how these criteria should be interpreted and sought the parties' comment.

93. In its response to access seekers' reply submissions,⁴⁹ Telstra discussed the East Australian Pipeline case.⁵⁰ Telstra contends that principles from the East Australian Pipeline case should be applied by the ACCC when considering the statutory criteria and making a determination in this dispute. In particular, Telstra states that the objective of regulatory certainty is implied into the objective of efficient investment under paragraph 152AB(2)(e) of the TPA. Telstra submits regulatory certainty means the ACCC must give due regard to the statutory criteria set out in section 152CR of the TPA and cannot ignore factors or only give them cursory consideration before putting them to one side. Telstra states the ACCC is required to weigh up all of the statutory criteria against one another when reaching its determination.⁵¹

ACCC's views

94. The ACCC is satisfied with its approach towards the interpretation of the criteria listed in subsection 152CR(1) of the TPA. Each of the criteria listed in that subsection has been taken into account in making this final determination.

95. Telstra wrote to the ACCC on 19 December 2007 seeking confirmation as to whether the ACCC would interpret the statutory criteria consistently with how it proposed in

⁴⁹ Telstra, *Telstra Corporation Limited* ("Telstra"), *Response to access seekers' reply submissions*, 17 October 2007, pp. 2-3.

⁵⁰ *East Australian Pipeline Pty Limited v ACCC* [2007] HCA 44.

⁵¹ Telstra, above n 49, pp. 2-3.

the consultation paper, and whether it would consult the parties on matters relating to ‘just terms’. The ACCC has considered this submission and does not consider that further consultation or submissions are required.

3.4.1 Paragraph 152CR(1)(a) Whether the determination will promote the long-term interests of end-users (LTIE) of carriage services or of services supplied by means of carriage services

Submissions from parties

96. Telstra considers that in order for the final determination to promote the LTIE, the ACCC must consider that investment decisions by access providers are long-term in nature and therefore short term effects are irrelevant to this criterion. Telstra asserts that the ACCC must ensure that it does not set prices which do not enable the access provider to recover costs from the prices of access services. Telstra contends that below cost pricing would have an adverse impact on long-term investment and discourages competitive build by promoting free-riding. This leads to unsustainable short-term competition and an increased reliance on the existing infrastructure. Below cost pricing also undermines the incentives for access providers to continue to invest and does not promote dynamic efficiency. Telstra submits that the ACCC must also have regard to the objective of promoting competition and considers that competition would not be promoted if the price determined for ULLS is below cost.⁵²
97. Access seekers generally agree with the ACCC’s interpretation of paragraph 152CR(1)(a). They seek that charges are based on the forward looking costs of an efficient access provider. Access seekers consider that charges that reflect the efficient cost of supplying the ULLS will best promote the LTIE and regard should be had to the likely effect of access charges on the supply of downstream services.⁵³ Broadband (DSL) services and voice services have been identified as relevant downstream services.⁵⁴
98. Most access seekers consider that competition will be promoted by ULLS access prices that are set closer to costs.⁵⁵ They consider that permitting Telstra to charge more than efficient costs will inflate costs to access seekers who use the ULLS to compete with Telstra in the voice and DSL markets using their own DSLAM infrastructure. Access seekers contend that setting a price above efficient costs will

⁵² Telstra, above n 7, pp. 21-23; Telstra, above n 15, pp. 9-10.

⁵³ Chime, Unconditioned Local Loop Service (ULLS), Submission of Chime Communications Pty Ltd (Chime), Part 1 – General Approach, 16 August 2007, pp. 2-3; Primus, *Unconditioned Local Loop Service (ULLS)*, Submission of Primus Telecommunications Pty Ltd (Primus), Part 1 – General Approach, 16 August 2007, p. 1, pp. 2-3; Optus, Unconditioned local loop service (ULLS), Submission of Optus, 16 August 2007, [5.1] - [5.10]; XYZed, *Unconditioned Local Loop Service (ULLS)*, Submission of XYZed, 16 August 2007, [5.1] – [5.10]; PowerTel and Request, *Unconditioned local Loop Service, Submissions of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 16 August 2007, pp. 4-5; Macquarie, *Unconditioned Local Loop Service (ULLS)*, Submission of Macquarie Telecom to the Australian Competition and Consumer Commission, August 2007, [2.3].

⁵⁴ Chime, above n 53, pp. 2-3; Primus, above n 53, pp. 2-3.

⁵⁵ Optus, above n 53, [5.1] - [5.10].

negate the potential benefits of lower prices and improved service quality for telephony and broadband services provided to end-users.⁵⁶

99. Optus submits that it does not agree with the emphases placed on a TSLRIC estimate of network costs. In particular, it considers that a TSLRIC approach does not encourage the economically efficient use of and investment in infrastructure.⁵⁷

ACCC's views

100. The ACCC has published a guideline explaining what it understands by the phrase “long-term interests of end-users” in the context of its declaration responsibilities.⁵⁸ The ACCC considers that a similar interpretation is appropriate to making a final determination in this arbitration.
101. 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.
102. The ACCC also notes that the Tribunal has offered guidance in its interpretation of the phrase “long term interests of end-users” (in the context of access to subscription television services):⁵⁹

Having regard to the legislation, as well as the guidance provided by the Explanatory Memorandum, it is necessary to take the following matters into account when applying the touchstone – the long-term interests of end-users:

** End-users: “end-users” include actual and potential [users of the service]
...*

** Interests: the interests of the end-users lie in obtaining lower prices (than would otherwise be the case), increased quality of service and increased diversity and scope in product offerings. ...[T]his would include access to innovations ... in a quicker timeframe than would otherwise be the case ...*

** Long-term: the long-term will be the period over which the full effects of the ... decision will be felt. This means some years, being sufficient time for all players (being existing and potential competitors at the various functional stages of the ... industry) to adjust to the outcome, make investment decisions and implement growth – as well as entry and/or exit – strategies.*

⁵⁶ Chime, above n 53, pp. 2-3; Primus, above n 53, pp. 2-3.

⁵⁷ Optus, above n 53, [5.2] – [5.14].

⁵⁸ ACCC, *Telecommunications services — Declaration Provisions: A Guide to the Declaration Provisions of Part XIC of the Trade Practices Act*, July 1999.

⁵⁹ *Seven Network Limited (no 4)* [2004] ACompT 11 at [120].

103. As explained further below, the ACCC considers that ULLS access prices that reflect the efficient (as opposed to actual) cost of supplying the ULLS will best promote the LTIE.
104. To consider the likely impact of particular terms and conditions on the LTIE, the TPA requires the ACCC to have regard to whether the terms and conditions are likely to result in:
- promoting competition in markets for carriage services and services supplied by means of carriage services
 - achieving any-to-any connectivity and
 - encouraging the economically efficient use of, and economically efficient investment in:
 - the infrastructure by which listed carriage services are supplied; and
 - any other infrastructure by which listed services are, or are likely to become, capable of being supplied.⁶⁰
105. In determining the extent to which terms and conditions are likely to result in the objective of promoting competition, regard must be had to the extent to which the terms and conditions will remove obstacles to end-users of gaining access to listed services.⁶¹
106. The ACCC considers that, in assessing whether particular terms and conditions will promote competition, it is relevant to consider markets in which DSL and voice services are supplied (retail and/or wholesale) and to consider whether the terms and conditions will remove obstacles to end-users gaining access to DSL and voice services.
107. This is because the ULLS is an input to the provision of a range of services, including fixed-line voice services (such as the provision of line rental, local call and long distance call services) and high-speed xDSL broadband internet access. This approach is consistent with the approach adopted by the Tribunal.⁶²
108. Obstacles to accessing fixed-line voice services include the price of the services and the ability of competing providers to provide voice services. Obstacles to accessing DSL services could be in the nature of DSL infrastructure not being available in the end-user's area, or the price of services that are available being too high, or their

⁶⁰ *Trade Practices Act 1974*, subsection 152AB(2).

⁶¹ *Trade Practices Act 1974*, subsection 152AB(4).

⁶² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [92]; *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [97], [149].

quality (measured by reference to, for instance, data transfer rates) being too low.

109. The ACCC considers that prices that reflect efficient forward-looking costs of supply will best promote effective competition in the supply of fixed-line voice services and broadband/DSL services. This is because such prices best enable access seekers to compete on an equal footing with other suppliers, including the access provider, in the supply of downstream voice and DSL services.
110. The ACCC considers that the terms of access addressed in this final determination do not directly affect the objective of achieving any-to-any connectivity.
111. In determining the extent to which terms and conditions are likely to result in the achievement of the objective of encouraging the economically efficient use of and investment in infrastructure, regard must be had to:
 - whether it is technically feasible for the services to be supplied and charged for with regard to technology that is in use, available or likely to become available; and the costs involved in supplying and charging for, the services that are reasonable or likely to become reasonable; and the effects or likely effects that supplying and charging for the services would have on the operation or performance of telecommunications networks
 - the legitimate commercial interests of the supplier or suppliers of the services, including the ability of the supplier or suppliers to exploit economies of scale and scope
 - incentives for investment in the infrastructure by which services are supplied; and any other infrastructure by which services are or likely to become capable of being supplied and
 - the risks involved in making the investment.⁶³
112. In the ACCCs view, the phrase “economically efficient use of and economically efficient investment in ... infrastructure” refers to the concept of economic efficiency that consists of three components:
 - 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) and
 - Dynamic efficiency – This reflects the need for industries to make timely changes to technology and products in response to changes in consumer

⁶³ *Trade Practices Act 1974*, sub-sections 152AB(6) and (7A).

tastes and in productive opportunities.

113. It is relevant here to consider the use of and investment in infrastructure used to supply the ULLS (i.e. the infrastructure necessary to provide the CAN, for example, ordering and provisioning systems and access networks), as well as infrastructure used to supply carriage and/or content services over the ULLS (for example, DSLAMs). This is consistent with the approach adopted by the Tribunal.⁶⁴
114. Again, the ACCC considers that access charges that reflect the efficient, forward-looking costs best meet these considerations. Such charges are consistent with the access provider's legitimate commercial interests and, in particular, enable access providers to exploit economies of scale and scope. These charges also provide correct incentives for the access provider and access seekers to make efficient investments in infrastructure used to supply the ULLS and downstream services. By promoting competition, these charges also encourage dynamic efficiency.
115. More recently, on the issue of efficient investment, the Tribunal has stated that:⁶⁵

...An access charge should be one that just allows an access provider to recover the costs of efficient investment in the infrastructure necessary to provide the declared service.

...efficient investment by both access providers and access seekers would be expected to be encouraged in circumstances where access charges were set to ensure recovery of the efficient costs of investment (inclusive of a normal return on investment) by the access provider in the infrastructure necessary to provide the declared service.

...access charges can create an incentive for access providers to seek productive and dynamic efficiencies if access charges are set having regard to the efficient costs of providing access to a declared service.

3.4.2 Paragraph 152CR(1)(b) The legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service

Submissions from parties

116. Telstra submits that it is legitimate for it to seek to earn a normal commercial return on its investment and that this requires that access prices enable cost recovery plus a return on investment that is commensurate with risk. Telstra also states that paragraph 152CR(1)(b) does not require that the costs which are taken into account under this criteria be efficient. Telstra asserts that it is in its legitimate business interest to recover the actual costs it incurs and this should be taken into account by the

⁶⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [159] - [161]; *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [104].

⁶⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [159], [164], [176].

ACCC.⁶⁶ Telstra considers that ULLS prices which reflect forward-looking and efficient costs of providing services will not enable it to satisfy its legitimate business interests.⁶⁷

117. Access seekers submit that it is a legitimate interest for the access provider to receive a normal commercial return, but that higher returns would not be legitimate. ULLS charges above normal commercial returns would be an abuse of Telstra's dominant position and allowing it to derive supra-normal profits would not be in Telstra's legitimate business interests.⁶⁸ Macquarie agrees with the ACCC's interpretation of the criterion in the ACCC's consultation paper.⁶⁹
118. Telstra submits that setting ULLS prices at the commercial rates offered by Telstra would be consistent with the statutory criteria. It contends that the ACCC should set prices for ULLS supplied inside the Optus HFC footprint at commercial rates offered by Telstra. Telstra considers that in the absence of information as to the precise location of the Optus HFC network, this should apply to ULLS prices in Bands 1 and 2.⁷⁰ Telstra further submits that the ACCC's interpretation of section 152CR of the TPA is consistent with this.⁷¹

ACCC's views

119. As outlined in the ACCC's *Access Dispute Guidelines*, the ACCC considers it is a legitimate interest for an access provider to earn a normal commercial return on its investment.⁷² In this regard, 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 TPA.
120. The ACCC notes that it would be a legitimate business interest for an access provider to seek to recover its costs as well as a normal commercial return on investment having regard to the relevant risk involved.
121. The ACCC further notes that 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

⁶⁶ Telstra, above n 7, p. 23.

⁶⁷ Telstra, above n 15, pp. 9-10.

⁶⁸ Chime, above n 53, p. 3; Primus, above n 53, p. 3; PowerTel and Request, above n 53, p. 5; Optus, above n 53, [5.11]; XYZed, above n 53, [5.11].

⁶⁹ Macquarie, above n 53, [2.3].

⁷⁰ Telstra, *Submissions of Telstra Corporation Limited ("Telstra"), Unconditioned Local Loop Service ("ULLS"), Lack of telecommunications investment in Australia and prices to be set in the Optus HFC Footprint*, pp. 10-12.

⁷¹ Telstra, *Access Disputes – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra – ULLS*, 12 November 2007. Telstra refers to the ACCC's submission dated 2 November 2007 in proceeding number S42 of 2007 in the High Court of Australia, paragraphs 81 and 88.

⁷² ACCC, *Resolution of telecommunications access disputes – a guide*, March 2004 (revised) ("*Access Dispute Guidelines*"), p. 56.

result of the provision of access.⁷³

122. Similarly, the Tribunal has stated that:

*The expression “legitimate business interests” is a general expression and is somewhat open-textured. What is “legitimate” conduct or a “legitimate” interest in business may be open to a number of differing interpretations. We consider that a carrier’s “legitimate business interests” is a reference to what is regarded as allowable and appropriate in commercial or business terms. In the context of s 152AH(1)(b), the expression connotes something which is allowable and appropriate when negotiating access to the carrier’s infrastructure. When looked at through the prism of a charge term and condition of access and its relationship to a carrier’s cost structure, it is a reference to the interest of a carrier in recovering the costs of its infrastructure and its operating costs and obtaining a normal return on its capital.*⁷⁴

123. The Tribunal expressly affirmed this approach in its consideration of Telstra’s ULLS undertaking.⁷⁵

124. It is the ACCC’s view that the term “legitimate business interests” does not necessarily extend to include costs associated with all investments, as on occasion there will be the potential for the access provider to make investments that were not efficient. The ACCC further notes that 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.⁷⁶

125. The ACCC is satisfied that the ULLS monthly charges it has determined in this access dispute do not impact on Telstra’s capacity to earn a normal commercial return on its investments.

126. The ACCC notes Telstra’s submission that as the ACCC has interpreted section 152CR of the TPA to “promote the assessment of the price that would be agreed between a reasonably willing seller and a reasonably willing buyer”,⁷⁷ the ACCC should set prices for the ULLS in Optus’ HFC network footprint at rates commercially agreed between Telstra and access seekers. The ACCC considers that the presence of an imbalance in bargaining power may mean that parties may not be able to reach any agreement on an appropriate selling price. This issue is discussed in detail in Part 4 of this statement of reasons.

⁷³ Ibid.

⁷⁴ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [89].

⁷⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [180].

⁷⁶ ACCC, above n 72, p. 10.

⁷⁷ ACCC, *Submission in proceeding number S42 of 2007 in the High Court of Australia*, 2 November 2007, at [81], [88].

3.4.3 Paragraph 152CR(1)(c) The interests of all persons who have the right to use the service

Submissions from parties

127. Telstra asserts that paragraph 152CR(1)(c) refers to “all persons”; which inherently contemplates a balancing of interests between the rights of end users and the rights of the access seeker. Telstra further submits that it is not in the long-term interests of either access seekers or end users who have rights to use the declared service for the ULLS to be supplied at below-cost prices.⁷⁸
128. Access seekers agree with the ACCC’s and the Tribunal’s interpretation of this criterion.⁷⁹ Optus and XYZed consider that the interests of all persons who have the right to use the service will be served if the price terms and conditions are set on a basis that enables access seekers to compete on their merits in downstream markets.⁸⁰ PowerTel and Request consider that these interests are best served by access prices that are set in accordance with TSLRIC pricing principles.⁸¹ Chime and Primus submit that their rights will be denied if the terms of access are unreasonably or unjustifiably expensive and this will result in diminished competition and detriment to the LTIE.⁸²

ACCC’s views

129. The ACCC notes Telstra’s submission concerning the rights of end users and Telstra’s example of its retail customers having rights to indirectly use the declared service by purchasing the retail service. While the ACCC agrees that retail services supplied to end-users involve the use of the ULLS, it does not consider that this gives them a right to use the ULLS. The ACCC considers that it is only the ULLS access seekers that the criterion contemplates. The interests of end-users are already to be considered under other criteria.
130. In *Telstra Corporation Limited* [2006] ACompT 4, the Tribunal provided its views on this criterion, indicating that it considers that “all persons” in paragraph 152CR(1)(c) contemplates the access seekers of the declared service and does not include end-users.⁸³

The interests of persons who have a right to use the LSS [Line Sharing Service], access seekers, are served by an access price that enables them to compete on their merits (that is, on the basis of their own efficiency) in downstream markets.

⁷⁸ Telstra, above n 7, p. 24.

⁷⁹ Optus, above n 53, [5.12]; XYZed, above n 53, [5.12]; Macquarie, above n 53, [2.3]; PowerTel and Request, above n 53, p. 8.

⁸⁰ Optus, above n 53, [5.12]; XYZed, above n 53, [5.12].

⁸¹ PowerTel and Request, above n 53, p. 8.

⁸² Chime, above n 53, p. 3; Primus, above n 53, p. 3.

⁸³ *Telstra Corporation Limited* (ACN 051 775 556) [2006] ACompT 4 (2 June 2006) at [138].

131. The Tribunal expressly affirmed this approach in its consideration of Telstra’s ULLS undertaking.⁸⁴

132. In assessing whether Telstra’s allocation of its ULLS specific costs across ULLS accessed or forecast accessed lines only was reasonable the Tribunal noted:⁸⁵

The interests of persons who have a right to use the ULLS: s 152AH(1)(c) ... [is] satisfied by giving all relevant parties, that is access seekers to the declared service and access providers of the declared service who are vertically integrated and provide retail products which compete with the products provided by access seekers who gain access to the declared service, the benefit and advantages of economies of scale and scope up to the point of access.

133. As noted in the ACCC’s *Access Dispute Guidelines*, people who have rights to currently use a declared service will generally use that service as an input to supply carriage services, or a service supplied by means of carriage services, to end-users.⁸⁶ In the case of the ULLS, the access service could also be used to provide a wholesale service to another service provider.

134. The ACCC considers that this class of persons has an interest in being able to compete for the custom of end-users on the basis of their relative merits. Terms and conditions that favour one or more service providers, including the access provider, over others and thereby distort the competitive process may prevent this from occurring and consequently harm those interests.⁸⁷

3.4.4 Paragraph 152CR(1)(d) The direct cost of providing access to the declared service

Submissions from parties

135. Telstra refers to the Tribunal’s views expressed in *Re Telstra Corporation Ltd* [2006] ACompT 4 and *Application by Optus Mobile Pty Limited & Optus Networks Pty Limited* [2006] ACompT 8 that this criterion is concerned with ensuring that the costs of providing the service are recovered. Further, that the appropriate cost concept to have regard to here is the long-run, such that distinctions between fixed and variable costs are not relevant.⁸⁸ Telstra disagrees with the ACCC’s interpretation of “direct costs” and considers that the term is not limited to direct incremental costs. Telstra submits that “direct costs” means actual costs, not efficient or forward-looking costs. Therefore, the ACCC must take into account Telstra’s actual costs when making a

⁸⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [262].

⁸⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [410].

⁸⁶ ACCC, above n 72, p. 57.

⁸⁷ *Ibid.*

⁸⁸ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [130]; *Application by Optus Mobile Pty Limited & Optus Networks Pty Ltd* [2006] ACompT 8 at [146].

final determination, even if Telstra's costs are not efficient.⁸⁹

136. The access seekers support the ACCC's use of a TSLRIC+ pricing methodology to calculate direct costs.⁹⁰ PowerTel and Request submit that ULLS prices must be cost-based and the ACCC's approach outlined in its ULLS pricing principles is the best available option.⁹¹

ACCC's views

137. The ACCC considers that the direct costs of providing access to a declared service are those incurred (or caused) by the provision of access and includes the incremental costs of providing access.
138. Consistent with the Tribunal's view, the ACCC has interpreted this criterion and the use of the term "direct costs" as not excluding consideration being given to a contribution to indirect costs.⁹² A contribution to indirect costs can be supported by other of the criteria also.
139. However, the criterion does not extend to permitting compensation for loss of any 'monopoly profits' that occurs as a result of increased competition.
140. In this regard, the *Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996* states:⁹³

... 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.

141. The ACCC also notes the Tribunal considers the direct costs criterion "is concerned with ensuring that the costs of providing the service are recovered",⁹⁴ and that "the effects of competition should not be considered as a direct cost of providing access to

⁸⁹ Telstra, above n 7, pp. 24-25.

⁹⁰ Chime, above n 53, p. 4; Chime, above n 41, p. 3; Primus, above n 53, p. 4; Primus, *Unconditioned local loop service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus), Response to Part 2 of Telstra's Submission – Preliminary matters and general approach*, 13 September 2007, p. 3; Optus, above n 53, [5.13] – [5.14]; XYZed, above n 53, [5.13] – [5.14]; Macquarie, above n 53, [2.3]; PowerTel and Request, above n 53, p. 6.

⁹¹ PowerTel and Request, above n 53, p. 6.

⁹² *Application by Optus Mobile Pty Limited and Optus Networks Pty Limited* [2006] ACompT 8 at [137].

⁹³ *Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996*, p. 44.

⁹⁴ *Telstra Corporation Limited* [2001] ACompT 4 (7 December 2001) at [92].

the ULLS”.⁹⁵ The ACCC considers its approach outlined in its *ULLS Access Pricing Principles* is consistent with the Tribunal’s view.⁹⁶

142. The Tribunal noted in its assessment of Telstra’s specific cost recovery approach that direct costs could conceivably be allocated (and hence recovered) in a number of ways (for example, across ULLS or LSS lines only, across ADSL lines, across all CAN lines) and that adopting any of those approaches would be consistent with this criterion:⁹⁷

Telstra’s approach to estimating a per unit cost is likely to be consistent with ensuring recovery only of direct costs. However, while direct costs will be incurred by Telstra in order to provide the declared service, there are a number of cost allocation methods other than that adopted by Telstra (including those suggested by the Commission and other interveners in this matter) that would enable it to recover the direct costs of investment in infrastructure necessary to provide a LSS.

143. Similarly, the Tribunal in its assessment of Telstra’s proposed average ULLS pricing structure noted that the pricing structure chosen would not have an impact on this criterion, as long as overall costs are recovered:⁹⁸

...the direct costs of providing access to the service are likely to remain unchanged irrespective of whether Telstra were to set average or de-averaged charges. Average and de-averaged ULLS charges are merely different ways of seeking to recover these costs.

144. Telstra has raised whether this criterion may support the proposition that an access provider should recover its actual costs, even if these do not reflect efficient forward-looking costs. The actual costs of an access provider are not necessarily higher than efficient costs and can fall somewhat below this level. While this particular criterion could support Telstra’s contention that regard should be paid to Telstra’s actual costs, other criteria militate against the view that an access provider would be entitled to recover costs above an efficient level in access charges. For instance, the Tribunal has stated the following:⁹⁹

⁹⁵ *Telstra Corporation Ltd (No 3)* [2007] ACompT 3 (17 May 2007) at [272].

⁹⁶ ACCC, above n 5.

⁹⁷ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [139].

⁹⁸ *Telstra Corporation Ltd (No 3)* [2007] ACompT 3 (17 May 2007) at [274].

⁹⁹ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [46].

Having regard to the conclusions which we have reached it is not necessary to determine whether Telstra's costs were established as efficient costs. However, we would point out that whenever an access provider seeks approval of an access undertaking from the Commission which involves a consideration of a price term by comparing it with costs, it would be necessary, in order to satisfy the statutory framework, that the access provider establish that its costs are efficient costs.

3.4.5 Paragraph 152CR(1)(e) The value to a party of extensions, or enhancement of capability, whose cost is borne by someone else

Submissions from parties

145. Telstra considers that this criterion is relevant to the consideration of ULLS mass network migrations (MNM)s and certain non-price terms.¹⁰⁰
146. Optus, XYZed, PowerTel, Request and Macquarie agree with the ACCC that this criterion is unlikely to be relevant to this access dispute.¹⁰¹ Chime and Primus consider that, with the exception of costs involved in manual service qualification as a result of Telstra's incomplete cable records, this criterion is not relevant.¹⁰²

ACCC's views

147. The ACCC has previously noted its view that:¹⁰³
- This criterion requires that if an access seeker enhances the facility to provide the required services, the access provider should not attempt to recover for themselves any costs related to this enhancement. Equally, if the access provider must enhance the facility to provide the service, it is legitimate for the access provider to incorporate some proportion of the cost of doing so in the access price.*
148. The ACCC remains of this view and has applied this approach in setting access prices in the final determination.

3.4.6 Paragraph 152CR(1)(f) The operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility

Submissions from parties

¹⁰⁰ Telstra, above n 7, p. 25.

¹⁰¹ Optus, above n 53, [5.15]; XYZed, above n 53, [5.15]; Macquarie, above n 53, [2.3]; PowerTel and Request, above n 53, p. 6.

¹⁰² Chime, above n 41, p. 3; Primus, above n 41, p. 3.

¹⁰³ ACCC, above n 72, p. 11.

149. Telstra considers that this criterion can be relevant to setting access prices as operational and technical requirements can have cost implications and these costs need to be recovered in access pricing in order for there to be sufficient funds available for Telstra to maintain a safe and reliable service. Further, this criterion is relevant to the consideration of disconnection costs, ULLS MNMs and several disputed non-price terms.¹⁰⁴ These issues are not being considered in the present dispute.
150. Access seekers agree with the ACCC that this criterion is generally unlikely to be relevant to this access dispute.¹⁰⁵

ACCC's views

151. The ACCC considers that this criterion requires that terms of access should not compromise the safety or reliability of carriage services and associated networks or facilities and that this has direct relevance when specifying technical requirements or standards to be followed.
152. The ACCC suggested to the parties that this criterion is generally unlikely to be relevant to disputes relating only to the price of access to a service. This is because the access price will have little direct bearing on the adoption of operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility. However, this criterion may be more relevant to disconnection costs, ULLS MNMs and non-price terms and conditions attaching to the supply of the ULLS that are in dispute (if any).
153. That said, the ACCC acknowledges that, in the long-run, access prices that are persistently below the efficient costs of supplying a service can, indirectly, compromise the safe and reliable supply of the service. Accordingly, the ACCC considers that efficient costs should be based upon a method of supply of the ULLS that meets the relevant operational and technical requirements necessary for the safe and reliable operation of the ULLS and facilities used to supply the ULLS.

3.4.7 Paragraph 152CR(1)(g) The economically efficient operation of a carriage service, a telecommunications network or a facility

Submissions from parties

154. Telstra submits that access prices should never be set below efficient cost recovery levels as this would lead to long-term economic inefficiencies.¹⁰⁶

¹⁰⁴ Telstra, above n 7, p. 25.

¹⁰⁵ Chime, above n 53, p. 4; Primus, above n 53, p. 4; Optus, above n 53, [5.16]; XYZed, above n 53, [5.16]; Macquarie, above n 53, [2.3]; PowerTel and Request, above n 53, p. 7.

¹⁰⁶ Telstra, above n 7, p. 25.

155. PowerTel, Request, Optus, XYZed and Macquarie agree with the ACCC's interpretation of this criterion.¹⁰⁷
156. Chime and Primus contend that where Telstra overcharges, access seekers' costs are unnecessarily raised leading to Telstra's infrastructure being under-utilised and demand for ULLS being discouraged. Further, where operational processes to facilitate access to service are absent, barriers to entry exist leading to underinvestment by Telstra in its infrastructure.¹⁰⁸

ACCC's views

157. As noted in the ACCC's *Access Dispute Guidelines*, the phrase "economically efficient operation" embodies the concept of economic efficiency as discussed earlier under the LTIE. That is, it calls for a consideration of dynamic, productive and allocative efficiency.¹⁰⁹
158. Further, consistent with the approach adopted by the Tribunal, the ACCC considers that in applying this criterion, it is relevant to consider:
- the economically efficient operation of downstream services provided by access seekers using Telstra's ULLS or by Telstra itself in competition with those access seekers and
 - the telecommunications networks and infrastructure used to supply these services.¹¹⁰
159. The *Access Dispute Guidelines* note that in the context of a determination, the ACCC may consider whether particular terms and conditions enable a carriage service, telecommunications network or facility to be operated efficiently. The ACCC considers that, in the context of access prices, prices that reflect the efficient forward-looking costs of the service best meet this criterion.

3.5 Additional matters and information to which the Commission intends to have regard in making the final determinations

160. Subsection 152CR(2) of the TPA allows the ACCC to have regard to additional matters. On 28 June 2007, the ACCC sought the parties' views on whether it should have regard to additional matters.

¹⁰⁷ Optus, above n 53, [5.17]; XYZed, above n 53, [5.17]; Macquarie, above n 53, [2.3]; PowerTel and Request, above n 53, p. 7.

¹⁰⁸ Chime, above n 53, p. 4; Primus, above n 53, p. 4.

¹⁰⁹ ACCC, above n 72, p. 57.

¹¹⁰ *Telstra Corporation Ltd (No 3)* [2007] ACompT 3 (17 May 2007) at [279] – [280]; *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006) at [94] – [95].

161. The parties nominated:
- decisions of the Tribunal
 - the ULLS pricing principles
 - previous decisions made by the ACCC in respect of Telstra's ULLS access undertakings
 - the final determination and statement of reasons in Chime's line sharing service access dispute with Telstra
 - the history of the regulation of LSS and ULLS pricing in Australia
 - the model terms and conditions
 - the *Utilities (Network Facilities Tax) Act 2006* (ACT) and the possibility of similar legislation eventuating in other jurisdictions, and
 - Telstra's need to recover GST costs as part of the ULLS charges.¹¹¹
162. The ACCC has had regard to these additional matters. The ACCC also has had regard to the various documents and matters that are referred to in this statement of reasons.
163. In respect of GST, the ACCC has made it clear in the final determination that all charges are expressed on a GST exclusive basis.

3.6 Period to which the final determination should apply

3.6.1 Backdating period

Introduction

164. Any or all of the provisions of a final determination may be specified to take effect earlier than the date on which the determination takes effect (subsection 152DNA(1)). The specified date must not be earlier than the date on which the parties to the determination commenced negotiations with a view to agreeing on the terms and conditions of access (subsection 152DNA(2)).
165. On 28 June 2007, the ACCC proposed to backdate certain terms of access in dispute to the date of notification of the access dispute. The ACCC advised the parties that it would consider backdating to an earlier time where it could be established that the parties commenced negotiations at a time materially earlier than the date of

¹¹¹ Telstra, above n 7, pp. 25-28; above n 46, p. 51; Chime, above n 53, pp. 4-5, Primus, above n 53, pp. 4-5; PowerTel and Request, above n 53, pp. 7-8; Optus, above n 53, at [6.1] – [6.2]; XYZed, above n 53, at [6.1] – [6.2]; Macquarie, above n 53 at [2.4].

notification. Also on 28 June 2007, the ACCC sought the parties' views.

Submissions from parties

166. Telstra submits that the final determination should commence 21 days from the date on which the final determination is made, i.e. there should be no backdating.¹¹²
167. Telstra submits that backdating is unnecessary and inappropriate because:¹¹³
- (a) the access seeker has been obstructive in negotiations which preceded or occurred during the arbitration of the dispute
 - (b) an interim determination was made in the dispute, negating the need for backdating
 - (c) backdating would not otherwise be in the LTIE and/or
 - (d) backdating would be inconsistent with published model price terms and conditions.
168. Telstra also submits that the ACCC needs to apply backdating with a degree of consistency and even-handedness.¹¹⁴
169. Telstra considers that negotiations which are entered into by an access seeker merely as “a show” prior to notifying an access dispute cannot be said to promote the rationale of section 152DNA of the TPA.¹¹⁵
170. Telstra considers that the ACCC's decision to make interim determinations on monthly charges in each of the access disputes and on connection charges in the Chime, Optus, Primus, PowerTel and Request disputes alleviates or in some instances negates the need to backdate a final determination.¹¹⁶
171. Telstra submits that it would be contrary to the LTIE to require Telstra to retrospectively compensate the access seekers with respect to a period in which Telstra was developing more efficient processes. It considers that it is unlikely that access seekers will pass on the amount of compensation it receives to its customers for that period in relation to which the final determination is backdated and therefore will be unlikely to have any effect on the promotion of competition.¹¹⁷

¹¹² Telstra, above n 7, p. 27.

¹¹³ Telstra, above n 7, p. 28.

¹¹⁴ Telstra, above n 7, pp. 28-32.

¹¹⁵ Telstra, *op cit*, pp. 28-31.

¹¹⁶ Telstra, *op cit*, pp. 31.

¹¹⁷ Ibid.

172. Telstra submits that any determination on monthly prices should not be backdated in circumstances where the ACCC has previously made a determination on ULLS monthly prices and Telstra has taken these determinations into account in its commercial negotiations.¹¹⁸
173. PowerTel and Request submit that negotiations with Telstra on ULLS prices commenced around 20 January 2006. Therefore, PowerTel and Request submit that the charges specified in the final determination should be backdated to 20 January 2006, instead of the date of notification (23 May 2006).¹¹⁹
174. In its reply submission, Telstra submits that the history of the dispute does not justify backdating. Telstra submits that PowerTel and Request have approached the dispute wholly opposed to reaching a negotiated agreement and that interim determinations were made in the dispute. Telstra contends that there have been no significant delays in the disputes and accordingly backdating is not warranted.¹²⁰
175. Telstra contends that PowerTel and Request have given no justification for its assertion that backdating should commence from 20 January 2006. Telstra considers this to be inappropriate, as it considers that PowerTel and Request never intended to engage in genuine commercial negotiations.¹²¹
176. Should backdating be allowed, Telstra submits that it is inappropriate to backdate to a date prior to the notification of the dispute. Telstra considers that this would give PowerTel and Request a windfall gain as a result of its strategy of non-cooperation in the negotiation period.¹²²
177. PowerTel and Request's reply submission rejects Telstra's contentions in relation to backdating and repeats their submissions-in-chief.¹²³ PowerTel and Request submit that the ACCC ought to apply the same approach to backdating as employed in the LSS access dispute between Request and Telstra and backdate to the earliest date on which the parties entered into negotiations in relation to the price for the declared service.
178. PowerTel and Request reject Telstra's assertion that PowerTel and Request have engaged in negotiations merely as a charade and submit that Telstra has failed or refused to negotiate with PowerTel and Request.¹²⁴ PowerTel and Request submit that Telstra has not made sensible commercial offers and that PowerTel and Request

¹¹⁸ Telstra, above n 46, pp. 55-57.

¹¹⁹ PowerTel and Request, above n 10, pp. 9-10.

¹²⁰ Telstra, above n 15, Annexure 4.

¹²¹ Ibid.

¹²² Ibid.

¹²³ PowerTel and Request, *Unconditioned Local Loop Service, Submissions in reply of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 13 September 2007, p. 12.

¹²⁴ PowerTel and Request, *op cit*, p. 19.

have not delayed the arbitrations.

179. PowerTel and Request submit that the ACCC ought to apply backdating so as to deter access providers from unduly delaying arbitral outcomes, and that backdating should be regarded as compensatory.¹²⁵ Accordingly they consider that the question of whether access seekers will pass on backdated amounts to customers is not a relevant consideration.
180. PowerTel and Request repeat that the parties commenced negotiations for ULLS prices on 20 January 2006.¹²⁶ They provide copies of correspondence with Telstra commencing on that date.

ACCC's views

181. The ACCC is required to formulate guidelines about its approach to backdating and to have regard to those guidelines, as well as any such matters as the ACCC considers relevant.¹²⁷ In this arbitration, the ACCC has considered the guidelines in deciding whether to backdate. The ACCC has also had regard to the ULLS Pricing Principles and the section 152CR criteria in deciding the terms to apply in the backdating period.
182. The guidelines are set out in sections 7.4.2 to 7.4.6 of the *Access Dispute Guidelines*.¹²⁸
183. As noted in the explanatory memorandum, the backdating provisions are intended to:¹²⁹
- ...encourage commercial agreement and co-operation during access arbitrations by removing incentives for delay and to ensure a considered and reasonable outcome is ultimately applied to the interim period which may otherwise be covered by an interim determination or a commercial agreement which one or more parties may be disputing.*
184. Consistent with this, the *Access Dispute Guidelines* aim to improve incentives to reach commercial agreement and co-operate during access arbitrations.
185. The guidelines provide that the ACCC will, in general, be inclined to backdate determinations. However, each case will be considered on its merits. In particular, the ACCC is likely to consider whether the manner in which the parties have conducted themselves before and during the arbitration provides grounds for not backdating the determination.

¹²⁵ PowerTel and Request, op cit, p. 20.

¹²⁶ PowerTel and Request, op cit, pp. 21-2.

¹²⁷ *Trade Practices Act*, sub-sections 152DNA(7) and (8).

¹²⁸ ACCC, above n 72, at [7.4.2] – [7.4.6].

¹²⁹ Supplementary explanatory memorandum for the Telecommunications Legislation Amendment Bill 1998, p. 33.

186. If, for example, prior to the notification of the dispute the access provider offered the access seeker price and non-price terms and conditions that are substantially similar to those determined by the ACCC and the access seeker refused, then it may not be appropriate to backdate. Similarly, if the access seeker has been tardy in responding to offers put forward by the access provider, then it may not be appropriate to backdate to the start of negotiations.
187. The ACCC will be inclined to backdate determinations to the date on which negotiations began, as demonstrated by the parties. Subsection 152DNA(2) establishes a maximum period of retrospectivity. However, this does not mean that it will always be appropriate to adopt that maximum period and the appropriate period of retrospectivity is likely to depend on the circumstances of the case.
188. The ACCC notes that prior to and after the notification of the dispute, Telstra did not offer PowerTel terms of access substantially similar to those that have now been determined by the ACCC. Nor does the ACCC consider that PowerTel acted to delay the arbitration or that PowerTel had no intention of reaching commercial agreement in relation to the various ULLS charges. Therefore, in accordance with its guidelines, the ACCC considers it would be appropriate to backdate the ULLS charges set out in the final determination.
189. The ACCC considers that ULLS annual charges, single connection charges and MNM charges should be backdated to commence on 20 January 2006. This was the date of the earliest written communication from the access seeker that sought to vary the terms on which ULLS was acquired from Telstra (the previous agreement on ULLS prices having expired). The communication on that date clearly put the issues of ULLS monthly charges and connection charges in dispute. While the scope of the negotiation and subsequent dispute is later expressed with more precision than in this initial email (ie. separately identifying single connections and managed network migrations as being in dispute), the commencement of negotiations for all notified terms can be traced back to this email.
190. The ACCC does not consider that its decision to publish Model Terms and Conditions in October 2003 means that it should not backdate in this instance. By the time the relevant negotiations between PowerTel and Telstra commenced (at 20 January 2006), the ACCC had expressly rejected ULLS monthly charges of \$14 in Band 1, \$22 in Band 2 and \$40 in Band 3 (December 2005).¹³⁰ Therefore, it could not be said that at any time during those negotiations Telstra was following any guidance the ACCC had issued.
191. The ACCC considers that, in the present circumstances, a failure to backdate would have serious adverse consequences. The charges that have applied between the parties in the relevant period are not reasonable when assessed against the subsection 152CR(1) criteria and the ULLS pricing principles, and have adverse consequences for the LTIE. Backdating charges that the ACCC considers to be more consistent with those criteria and principles is a means by which to redress this harm. It also

¹³⁰ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings — Final decision*, December 2005.

strengthens incentives for the access provider to set more reasonable charges in future, and promotes efficient entry and business planning by access seekers. This is because they have greater assurance that they will face access charges consistent with the ACCC's published approach from the start of access negotiations (should those negotiations fail). Therefore, the ACCC does not accept Telstra's submission that ULLS annual charges should not be backdated.

192. In deciding the ULLS annual charges, single connection charges and MNM connection charges to apply during the backdated period, the ACCC has considered the subsection 152CR(1) criteria and the ULLS pricing principles. This assessment is provided later in this statement of reasons.
193. The ACCC does not consider that the making of interim determinations means that it should not backdate in this instance. The interim determination prices were clearly to apply on an interim basis. It was noted at the time that prices could be revised for the final determination.
194. The ACCC did not backdate the other MNM terms that are addressed in the final determination as it did not consider that doing so would have a practical effect (minimum number of services to connect, minimum exchange charge) and because it did not consider that they should take effect prior to them being advised to the parties (MNM cancellation charges).

3.6.2 Expiry date

Introduction

195. A provision of a determination may be expressed to terminate on a specified date (sub-section 152DNA(4)). Although not currently a requirement of the legislation, the ACCC would usually expect to limit the duration of a determination to a certain period in this way. On 28 June 2007, the ACCC proposed to the parties an expiry date for the final determination of 30 June 2008, and sought the parties' views.

Submissions from parties

196. Telstra, Primus, PowerTel and Request accept the expiry date of the final determination and consider it appropriate.¹³¹ Telstra further submits that the expiry date should not exceed 30 June 2008.¹³²
197. Chime considers that if the final determination expires on 30 June 2008, it will not have operated for an adequate duration. Chime proposes an expiry date of 30 December 2008. Chime submits that it will need a lead time of many months to restructure its business operations to provide services over the ULL. It currently has only a few ULLS in operation because it is waiting on the final determination to enable it to invest in the ULLS with certainty and it considers that MNM to the ULL

¹³¹ Telstra, above n 7, p 32; Primus, above n 53, p. 6; PowerTel and Request, above n 53, p. 10.

¹³² Telstra, above n 7, p 32.

from the LSS is currently almost impossible. Chime submits that without an extension of the expiry date, it will be severely inhibited from taking advantage of the final determination.¹³³

ACCC's views

198. The ACCC has decided to maintain the position proposed to the parties on 28 June 2007 and to specify an expiry date for the final determination of 30 June 2008.
199. The ACCC recognises that it would be preferable to provide certainty to the parties over the terms of access that are to apply in future, as this certainty over access best allows parties to plan their business operations and compete in the market for downstream services. This would support the view that the ACCC should set terms of access for future periods where it is reasonably able to do so.
200. This needs to be balanced however against the possibility that the terms of access that would now be set for a future period could depart from the terms that would best reflect the ULLS pricing principles and the section 152CR criteria. This calls for consideration as to whether the available data provides an appropriate basis to forecast the TSLRIC+ of the ULLS for the relevant period.
201. In this case, the ACCC considers that the TSLRIC+ of certain cost categories can be forecast for the remainder of 2007-08 and for 2008-09, such as for 'specific-costs' and connection costs.
202. However, it is less clear that the available data allows the ACCC to directly measure, or otherwise reliably forecast, the network costs for the ULLS for 2008-09. The ACCC notes that the cost model that it has used to estimate network costs does allow for the TSLRIC+ of the ULLS to be measured for 2007-08 but does not directly allow for 2008-09 costs to be forecast.
203. While the ACCC could possibly still forecast 2008-09 costs on a delta approach (whereby the 2007-08 measure would be adjusted having regard to trends in cost levels, demands and productivity), the ACCC notes that it is preparing a new fixed-line network cost model that will allow for a direct TSLRIC+ measure of network costs to be made for 2008-09. This model is expected to be available during the first half of 2008. Telstra is also preparing its own cost model. In these circumstances, the ACCC considers that it is preferable to await the new network cost models to estimate costs for 2008-09. Accordingly, the ACCC has chosen to set access charges up to and including 2007-08 only, and has set the expiry date for the FD at 30 June 2008.

3.6.3 Interest

Introduction

204. Subsection 152DNA(6) of the TPA provides the ACCC with a discretion to require interest to be paid in instances of backdating at a rate specified in the determination. The ACCC proposed to the parties in its consultation paper that interest should be

¹³³ Chime, above n 53, pp. 5-6.

included on under or over payments and suggested this be at the Reserve Bank of Australia (RBA) Large Business Variable Indicator Rate. On 28 June 2007, the ACCC sought the parties' views.

Submissions from parties

205. Telstra submits that the interest rate proposed by the ACCC is not appropriate. It considers that the appropriate rate to use is the 90-day bank bill rate. Further, Telstra submits that interest should be payable from no earlier than the date on which the ACCC issued the interim determinations in each access dispute.¹³⁴
206. In its response submission, Telstra contends that debt financing rates are not reflective of opportunities that access seekers have foregone as a result of making a higher payment to Telstra. It considers that internal rates of return for investment are inappropriate in the context of a final determination because they are not constant over time. Telstra also considers that the interest provisions in each customer relationship agreement ("CRA") are not appropriate for final determinations made pursuant to the arbitration regime in Part XIC of the TPA.¹³⁵
207. Chime agrees that interest should be paid in instances of backdating in principle but does not seek backdating or interest, given the number of ULLS lines acquired by Chime.¹³⁶ However, Chime later submitted that backdating should occur for at least any period following the expiry of its interim determination.¹³⁷
208. Primus submits that the interest proposed by the ACCC is an unreasonable application of guideline 7.4.4 of the ACCC's *Access Dispute Guidelines*. It contends that the appropriate interest rate is the rate specified in Primus' CRA with Telstra. Primus contends that interest should be calculated from the date on which the first overpayment was made to the date the final determination is made. Further, Primus submits that interest should be compounded daily.¹³⁸
209. Optus notes that the approach adopted by the ACCC is consistent with that taken in its recent final determinations on mobile transmission access service (MTAS) prices. Optus considers that it is reasonable to determine interest payments for ULLS charges on a consistent basis. However, Optus does not consider that the ACCC's approach to the interest rate is conceptually correct and contends that the approach is likely to overstate the actual financing costs incurred by the parties to the dispute. Optus submits that the ACCC should base the interest rate on each individual company's credit rating.¹³⁹

¹³⁴ Telstra, above n 7, pp. 32-33.

¹³⁵ Telstra, above n 15, p. 13.

¹³⁶ Chime, above n 53, p. 6.

¹³⁷ Chime, *Telecommunications Access Dispute – Chime – Telstra ULLS*, 6 December 2007, p. 1.

¹³⁸ Primus, above n 53, p. 7-9.

¹³⁹ Optus, above n 53, [7.12] – [7.15].

210. PowerTel and Request proposes an interest rate of 15% and consider that this is consistent with the Guidelines and is a conservative figure.¹⁴⁰

211. Macquarie agrees with the ACCC's proposed interest rate and considers it appropriate.¹⁴¹

ACCC's views

212. Under subsection 152DNA(7) of the TPA, the ACCC is required to have regard to its *Access Dispute Guidelines* and such other matters as it considers relevant in determining whether or not interest should be charged.

213. The *Access Dispute Guidelines* provide that the ACCC "will generally" provide for the payment of interest on "backdated amounts" (the amounts underpaid or overpaid by an access seeker having regard to the charges and the period of backdating that are specified in the final determination).¹⁴² The interest component is used in conjunction with backdating to remove the incentive for delay.

214. However, the ACCC evaluates interest on a case-by-case basis and does not consider that interest is automatically payable in every circumstance in which backdating of a final determination occurs.

215. As specified in the *Access Dispute Guidelines*, where interest is to be paid, it will be calculated on the amounts of money that have been overpaid (or underpaid) and will usually be calculated by reference to:¹⁴³

- the volume of services supplied by the access provider to the access seeker over the backdating period and
- the charges that are specified in the final determination.

216. Further, the rate of interest should reflect the opportunity cost of the overpayment (or underpayment) and, in general, daily compounding will be appropriate. Lastly, the guidelines also suggest that the opportunity cost could be assessed by reference to the rate applicable to debt financing.¹⁴⁴

217. In the current arbitration, the ACCC considers that it is appropriate to specify that interest is charged on the overpayments that have occurred. Given the time value of money, the access seeker would be denied the full benefit of the determination in the absence of an award of interest.

¹⁴⁰ PowerTel and Request, above n 53, pp. 10-11.

¹⁴¹ Macquarie, above n 53, [2.5].

¹⁴² ACCC, above n 72, pp. 63-64.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

218. Consistent with the approach suggested by the *Access Dispute Guidelines*, the ACCC has specified that the RBA's Large Business Variable Indicator Rate should be used to calculate interest and interest shall be charged on a daily basis and compounded. Interest is to be paid from the date of each overpayment and ends 21 days after the final determination is made.
219. This interest rate can be obtained from the RBA. The ACCC has also attached a historical rate series to this statement of reasons.
220. The ACCC considered the parties' suggested alternative rates of interest. The ACCC considers that the 90 day bank bill rate does not represent the opportunity cost of money to the access seeker.
221. The ACCC considered the use of contractually agreed rates but, while such rates could be used in the way suggested by Primus, the ACCC has decided not to use contractually agreed rates.
222. Further, the ACCC does not consider that the investment of all overpayments would yield a rate of return of around 15% per annum.
223. The ACCC considers that the backdated amount is to be paid and not credited against current or future invoices, unless the parties agree otherwise. This is the usual approach. The ACCC accepts that there is the potential for the effects of the final determination being realised by the access seeker and for interest calculations to be unnecessarily complicated, were Telstra's suggested approach to be adopted. Telstra remains able to separately obtain payment on any accounts as they become payable by the access seeker and there is no suggestion that the access seeker would be unable to pay these accounts as they fall due.

3.6.4 Date of payment of settlement amount

Submissions from parties

224. Chime and Primus submit that the settlement amount should be paid within 28 days after the date on which the final determination is made, rather than within 42 days as proposed by the ACCC in its draft final determination.¹⁴⁵
225. In its response submission, Telstra contends that the date of payment of the settlement amount should be no less than 42 days after the date on which the final determination is made. Telstra claims that this is because the steps involved in determining and negotiating the settlement amount is complex and time-consuming.¹⁴⁶

¹⁴⁵ Chime, above n 53, p. 6; Primus, above n 53, p. 9.

¹⁴⁶ Telstra, above n 15, pp. 13-14.

226. Further, Telstra submits that instead of paying the settlement amount to access seekers as a lump sum, the settlement amount should be offset against any future payments that the access seeker is required to pay to Telstra.¹⁴⁷

ACCC's views

227. The ACCC maintains its preliminary position in its draft final determination that except where the parties agree otherwise, the settlement amount is to be paid as a lump sum by Telstra to PowerTel within 42 days after the date on which this determination is made (ie 21 days after the determination takes effect).

¹⁴⁷ Ibid.

4. Terms & Conditions Addressed in the Joint Hearing

4.1 ULLS annual charges¹⁴⁸

4.1.1 Background to dispute over ULLS annual charges and overview of approach

228. Telstra has proposed in previous regulatory proceedings a variety of monthly prices for the ULLS since its declaration in 1999, including undertaking assessments, indicative price determinations and model price processes.
229. There are two broad issues in the consideration of ULLS charges, although the two issues are inter-related. The first issue relates to the appropriate level of prices and more specifically to the appropriate cost model to be used, appropriate inputs to cost modelling and assumptions about specific cost allocation. The second relates to the appropriate structure of prices and whether prices should be geographically averaged or de-averaged.
230. In December 2004, Telstra proposed in an undertaking to charge ULLS monthly prices of \$13, \$22, \$40 and \$100 in Bands 1, 2, 3 and 4 respectively. Following a public inquiry, the ACCC considered that it could not be satisfied that the prices in that undertaking were reasonable.
231. Most recently, in December 2005, Telstra proposed in an undertaking given to the ACCC to charge a \$30 geographically averaged ULLS monthly price in all geographic bands. That undertaking was considered by both the ACCC and on appeal by the Australian Competition Tribunal. Both the ACCC (August 2006) and the Tribunal (May 2007) were not satisfied that the undertaking was reasonable.
232. Despite these rulings, Telstra has continued to require access seekers to pay its proposed monthly charges, other than where an interim determination was in place. Telstra generally charged its proposed geographically de-averaged prices until April 2006. From that point on it has generally charged the geographically averaged price of \$30 per month.
233. During this time the ACCC has arbitrated a number of ULLS access disputes. The access seekers participating in this joint arbitration hearing all notified ULLS access disputes in the period from November 2005 to July 2006. Around April to June 2006, the ACCC issued interim determinations in three of the disputes that preserved the de-averaged prices of \$13, \$22, \$40 and \$100 that Telstra had charged before 10 April 2006 in Bands 1, 2, 3 and 4 respectively. These interim determinations were issued

¹⁴⁸ ULLS annual charges and ULLS monthly charges are used interchangeably throughout this document.

pending the ACCC's consideration of geographic averaging in its assessment of Telstra's December 2005 undertaking.

234. Following those 'status quo' interim determinations, the ACCC subsequently issued interim determinations in all access disputes concerning monthly charges for access seekers participating in this joint arbitration hearing from August 2006 to September 2006. Those interim determinations set prices of \$7.20, \$17.70 and \$34.20 per month in Bands 1, 2 and 3 respectively. The decrease in prices reflected decisions made following the Tribunal's ruling on the appropriate recovery of specific costs in its assessment of Telstra's LSS undertaking.¹⁴⁹ However the ACCC's prices were set on a conservative basis as they accepted Telstra's claimed network costs and only partially adjusted Telstra's claimed specific costs with updated data.¹⁵⁰
235. On 28 June 2007, the ACCC provided to the parties a DFD specifying the following ULLS monthly charges to apply up until 30 June 2008:

Band	2005-06	2006-07	2007-08
1	\$ 5.50	\$ 5.80	\$ 6.00
2	\$ 12.60	\$ 13.90	\$ 14.40
3	\$ 27.00	\$ 29.20	\$ 30.30

236. The ACCC did not specify prices to apply in Band 4.¹⁵¹ The ACCC proposed that level of charges as a result of further analysis of:
- Telstra's incremental costs of supplying ULLS and LSS to access seekers and of supplying line sharing to itself consistent with the Tribunal's ruling
 - Telstra's network costs of the copper line over which the ULLS is supplied.
237. The ACCC proposed not to geographically average the ULLS monthly charges, given the views of the Australian Competition Tribunal in its decision on Telstra's ULLS monthly charge undertaking.¹⁵²
238. The ACCC consulted the parties in its consultation paper accompanying the DFD on the appropriate level and structure of prices.

¹⁴⁹ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006).

¹⁵⁰ See, for example, ACCC, *Access dispute between Chime Communications and Telstra—Unconditioned Local Loop Service—reasons for interim determination*, August 2006, published 1 Sep 06, available at <<http://www.accc.gov.au/content/index.phtml?itemId=760353>>, pp. 3-7.

¹⁵¹ The reasons for this were set out in the ACCC's consultation paper that was issued with the DFDs.

¹⁵² *Telstra Corporation Ltd (No 3)* [2007] ACompT 3 (17 May 2007).

239. Both these issues are discussed further below.

4.1.2 Participants

240. Telstra, Chime, Optus, XYZed, Primus, PowerTel, Request, and Macquarie all participated in a joint hearing regarding ULLS monthly charges.

4.1.3 Current charges

241. Chime, Optus, XYZed, Primus, PowerTel, Request, and Macquarie are each in dispute with Telstra over ULLS monthly charges. These charges are addressed in Customer Relationship Agreements (“CRAs”) or access agreements between each party and Telstra. The parties are currently paying either those charges or charges specified in the interim determinations for their disputes, although certain of the interim determinations expired during the course of the arbitrations.

4.1.4 Prior consideration

242. ULLS monthly charges (also referred to as annual charges) have been considered by the ACCC in a number of proceedings. Recent decisions include:
- *ACCC, Assessment of Telstra’s ULLS monthly charge undertaking—final decision*, August 2006.
 - *ACCC, Assessment of Telstra’s ULLS and LSS monthly charge undertakings – final decision*, December 2005.
 - *ACCC, Assessment of Telstra’s undertakings for PSTN, ULLS and LCS—draft decision*, October 2004.
243. The ACCC also considered ULLS monthly charges in setting interim determinations in each of the access disputes involved in this joint arbitration hearing.
244. ULLS monthly charges have also been considered by the Tribunal.¹⁵³ The appropriate recovery of LSS specific costs, which are relevant to the consideration of the appropriate recovery of ULLS specific costs, was also considered by the Tribunal in an earlier decision.¹⁵⁴
245. The ACCC conducted a public inquiry into the appropriate pricing principles to apply to the ULLS in October 2007. The ACCC’s final pricing principles were published in November 2007.¹⁵⁵ The ACCC did not finalise its pricing principles prior to this time given that there were a number of issues relevant to pricing being considered in

¹⁵³ Ibid.

¹⁵⁴ *Telstra Corporation Limited (ACN 051 775 556)* [2006] ACompT 4 (2 June 2006).

¹⁵⁵ ACCC, above n 5.

undertakings and subsequently on appeal to the Tribunal.

4.1.5 Principles to apply

246. The ACCC initially proposed to the parties as part of the DFD consultation paper that ULLS monthly charges should be determined by reference to the draft ULLS pricing principles, as set out in:

- ACCC, *Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination*, July 2006, Chapter 7

and the previous ULLS pricing principles, as set out in:

- ACCC, *Pricing of unconditioned local loop services (ULLS)—final report* March 2002.

247. Both these documents state that the ACCC will apply a TSLRIC pricing principle to the pricing of the ULLS. In practice, the ACCC typically includes a contribution to indirect or organisational costs (TSLRIC+).

248. The ACCC's view was that, in correct application of those principles and in order to reflect a TSLRIC+ approach to ULLS monthly charges, consideration should be given to two components of the ULLS monthly charge:

- the efficient costs of the line over which the ULLS is supplied ('network costs')
- the efficient incremental (or 'specific') costs associated with the ordering, provisioning and qualifying of lines for ULLS, LSS or Telstra's equivalent use of the copper pair.

249. Following the issuing of final ULLS pricing principles in November 2007, the ACCC consulted with the parties again on the applicability of those new pricing principles, as set out in:

- ACCC, *Unconditioned Local Loop Service—final pricing principles*, November 2007.

250. The final pricing principles contained the following conclusions relevant to ULLS monthly charges:

- a TSLRIC+ pricing principle should be applied to the ULLS
- a specific cost component should be included in the ULLS monthly price, calculated by combining 'ULLS-specific costs' with 'LSS-specific costs' and Telstra's internal equivalent costs for ADSL, and allocating those costs across the number of active ULLS, LSS and ADSL lines
- the ULLS charges should be geographically de-averaged.

251. The parties' submissions regarding the use of these principles have been discussed earlier in these reasons. The parties are generally supportive of the use of the ULLS pricing principles, although as noted elsewhere, Telstra makes submissions against applying certain aspects of the ULLS pricing principles.

4.1.6 Level of ULLS monthly charges

252. As noted above at 4.1.1, the ACCC considers that there are effectively two broad issues in the consideration of ULLS monthly prices. The first of these is the appropriate level of prices.
253. The ULLS pricing principles provide that ULLS prices should be cost based, with necessary cost estimates derived from a TSLRIC+ methodology. The ULLS pricing principles provide additional guidance on certain matters that arise in implementing the TSLRIC+ methodology for the ULLS. Under the principles, it is only the efficient, forward-looking level of costs that are brought to account in setting ULLS monthly charges.
254. A variety of issues relevant to the appropriate level of ULLS monthly prices have been the subject of significant debate since declaration, including:
- the appropriate cost model(s) for use in estimating ULLS costs
 - the appropriate cost components to be included in cost models and the method of recovery of these cost components
 - the appropriate inputs for cost models, such as trench sharing, asset lives and cost of capital inputs.
255. In its consultation paper that accompanied the DFDs, the ACCC proposed to estimate the level of costs for the ULLS with reference to two cost components:
- network costs, which refer to the capital, operational and maintenance, and indirect costs of Telstra's fixed line network. In particular, for the ULLS, the relevant efficient network costs are the efficient costs attributable to the copper lines between the end-user and the exchange.
 - specific costs, which refer to incremental costs incurred by Telstra to allow for supply of the declared ULLS and other products, and include costs incurred in connection with ordering, provisioning and qualifying the ULLS or other product.
256. The ACCC advised parties in its consultation paper of its preliminary view to estimate the level of ULLS costs through the use of two cost models:
- Telstra's PIE II network cost model, adjusted for certain preferred ACCC input variables

- a specific cost model developed by the ACCC, giving effect to the Tribunal's views on the appropriate recovery of specific costs, and using data from Telstra's previously submitted specific cost models.

257. Parties' submissions were sought on the appropriateness of the ACCC's proposed approach and on the inputs used in calculating the appropriate level of costs.
258. The views reached on these issues have the potential to influence (to varying degrees) the measurement of TSLRIC+. These are discussed in turn below.
259. For those matters considered to have a material bearing on TSLRIC+, and hence the ULLS monthly charges set in this arbitration, and where alternative approaches that could be practically implemented have been advanced, the ACCC has considered these approaches against the matters in subsection 152CR(1) of the TPA.

4.1.7 Appropriate cost model to apply

260. The ACCC's consultation paper proposed to use the PIE II network cost model, populated with the ACCC's preferred inputs, and a specific cost model to estimate ULLS costs, and sought parties' submissions on the appropriate inputs for such models.
261. Telstra put forward an alternative cost model based on current cost accounting ("CCA") data in its initial submissions. Telstra provided a copy of the Excel spreadsheet model as part of the supporting material provided on CDs. Following that, the ACCC sought supplementary views from the parties on the appropriateness of using CCA data, such as whether CCA balances were likely to represent efficient forward-looking costs, whether the cost categories Telstra identified were necessary for supply of the ULLS and whether any costs were likely recovered through other charges.
262. Following the release of the ACCC's supplementary consultation paper to the parties on 27 November 2007, which sought parties' submissions on (among other things) Telstra's CCA data, Telstra submitted an updated version of its alternative cost model based on CCA data.¹⁵⁶

Submissions from parties

263. Telstra provided submissions on appropriate inputs, changes and exogenous adjustments relevant to the estimates of costs generated by the PIE II network cost model and ACCC specific cost model.¹⁵⁷ These submissions are discussed further in this statement of reasons.
264. However, Telstra also submitted that the ACCC have regard to certain alternative cost

¹⁵⁶ Telstra, above n 20.

¹⁵⁷ Telstra, above n 46, pp. 28-50.

modelling approaches:

- a cost model, described by Telstra as “Telstra’s model”, based on a top-down valuation of costs using CCA data from Telstra’s regulatory accounts¹⁵⁸
- the ACCC’s previous network cost model, the n/e/r/a model¹⁵⁹
- international benchmarks.¹⁶⁰

265. Telstra submitted that, in the absence of accurate bottom-up cost information (although it did not agree that such information was absent), it would be appropriate to have regard to a top-down valuation of costs in assessing TSLRIC+. ¹⁶¹ Telstra’s model identified various asset and expense categories in its CCA Regulatory accounting framework (“RAF”) accounts that it considered should be included in such a top-down valuation.¹⁶² These cost categories can largely be categorised into:

- network asset and expense categories, namely CAN ducts and pipes and CAN copper cables (which Telstra submits make up the ‘vast majority’ of costs attributed to ULLS in its CCA data).¹⁶³
- organisational assets, such as non-communications plant and equipment, other non-current assets and current assets and free funds, and organisational expenses such as general administration and IT
- product and customer costs.

266. Telstra’s model does not explicitly separately calculate network and specific costs.

267. Connection/installation costs were excluded by Telstra as these costs are recovered through connection charges. The model then annualises the opening undepreciated value of the assets and adds operating, product and customer costs to obtain a total ULLS cost, which it then converts to a per-ULLS cost.¹⁶⁴

268. Telstra acknowledges that its accounts are prepared on a fully distributed cost basis rather than a TSLRIC+ methodology, but submits that its measure would still approximate TSLRIC+. ¹⁶⁵ Further, while Telstra acknowledges that its cost claim has been derived from actual historic costs, it considers these costs to be forward-looking,

¹⁵⁸ Telstra, *op cit*, pp. 21-28.

¹⁵⁹ Telstra, *op cit*, pp. 39-40.

¹⁶⁰ Telstra, *op cit*, p. 54.

¹⁶¹ Telstra, *op cit*, p. 21.

¹⁶² Telstra, *op cit*, Annexure 6.

¹⁶³ Telstra, above n 20, pp. 2-3.

¹⁶⁴ Telstra, above n 46, p. 21.

¹⁶⁵ Telstra, *op cit*, p. 22.

in the sense that the costs represent actual replacement costs and are annualised.¹⁶⁶

269. Telstra submits that its CCA costs are efficiently incurred. It provides estimates of its business-wide total factor productivity (TFP) over time and compared to other carriers, and also a measure of its fixed-line TFP. Telstra submits that these results support the view that its actual costs were efficiently incurred.¹⁶⁷ Telstra also submits that there is evidence that its model in fact understates efficient current costs, in that it argues that the omitted asset bias in the model is greater than the obsolete asset bias in the accounting data.¹⁶⁸
270. Telstra further submits that the inefficiency of Telstra's operations that is implied by the ACCC's most recent estimates of ULLS costs is not credible due to a lack of evidence of any inefficiency and Telstra's TFP study. Telstra contends that the ACCC's ULLS cost estimates suggest inefficiency in the order of [c-i-c] per cent to [c-i-c] per cent, or that there is an additional [c-i-c] to [c-i-c] centimetres of unnecessary ducts, pipes and cable for every metre in Telstra's CAN.¹⁶⁹ In any event, Telstra also notes that its proposed price of \$30 is lower than the costs calculated by Telstra's top down model and, accordingly, even if Telstra's deployment of CAN ducts pipes or copper cables was as much as [c-i-c] per cent to [c-i-c] per cent inefficient (which is denied) this would not invalidate Telstra's proposed \$30 ULLS monthly (average) price.
271. In respect of the ACCC's concerns regarding the allocation of costs to the ULLS under the CCA framework Telstra notes that:
- Costs are allocated to ULLS in Telstra's CCA according to the Regulatory Accounting Rules agreed to by the ACCC;
 - Telstra's CCA is independently audited;
 - The vast majority of the costs that Telstra relies upon from its CCA are CAN ducts and pipes and CAN copper cables, which the ACCC has acknowledged are relevant to the ULLS cost; and
 - reiterates that the other CCA data categories (which Telstra further details) included in Telstra's alternative model are immaterial to the ULLS price but does make some downward adjustments in response to issues raised by the ACCC in the supplementary consultation paper.¹⁷⁰
272. Telstra acknowledges that the Tribunal declined to accept Telstra's CCA costs as a measure of efficient forward-looking costs. Telstra considers that the Tribunal's reasons for doing so are distinguishable. Telstra advises that in its view the Tribunal was noting that it could not be positively satisfied that Telstra had provided sufficient

¹⁶⁶ Telstra, *op cit*, pp. 26-7.

¹⁶⁷ Telstra, *op cit*, pp. 23-5.

¹⁶⁸ Telstra, *op cit*, pp. 27-8, Annexure 11.

¹⁶⁹ Telstra, above 20, p. 2.

¹⁷⁰ Telstra, *op cit*, p. 3.

evidence that the CCA costs were efficient, and that its use of an annuity formula in the present arbitrations overcomes this.¹⁷¹

273. Telstra advises that costs recovered from exchange cabling charges and Telstra Exchange Building Access charges have been removed. Telstra also submits that there is no evidence that it has included cost categories that are unnecessary to the supply of the ULLS. Telstra reiterates a number of its views, including that the ACCC's proposed cost model excludes relevant cost categories, and that the ACCC should adopt the CCA as the best available evidence of efficient costs. Telstra notes that its alternative cost model is consistent with the statutory criteria because it is an accurate calculation of the TSLRIC+ of providing the ULLS.¹⁷²
274. In relation to the use of CCA data in the PIE II model, PowerTel and Request refer to consultant's advice that current costs do not provide appropriate build/buy signals or encourage competitive outcomes.¹⁷³ They separately refer to the Tribunal's view that it did not consider that the current cost of building an existing CAN is necessarily likely to be an accurate guide to the forward-looking TSLRIC of providing the ULLS.¹⁷⁴ This is also submitted by both Chime and Primus.¹⁷⁵
275. PowerTel and Request also submit that the results of Telstra's model, which produces cost estimates of \$[c-i-c] per month while Telstra is seeking a \$30 a month price, demonstrate that Telstra's claim is made without any real basis.¹⁷⁶ An equivalent submission is made by Macquarie in its reply submission.¹⁷⁷
276. PowerTel and Request submit that the TFP study should not be given weight by the ACCC as it is irrelevant, lacks independence and cannot be tested.¹⁷⁸ Chime submits in reply that Telstra's TFP study should not be given weight by the ACCC.¹⁷⁹ Chime refers to concerns about the independence of the study, the lack of primary evidence and the fact that international comparisons can often be limited in their usefulness. Primus raises the same concerns.¹⁸⁰ Telstra rejects the submissions about independence and provides underlying data that it considers would allow testing to

¹⁷¹ Telstra, *op cit*, p. 11.

¹⁷² Telstra *op cit*, pp. 6-7, 11-12.

¹⁷³ PowerTel and Request, above n 53, p. 19.

¹⁷⁴ PowerTel and Request, *Unconditioned Local Loop Service, Submissions in reply of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 13 September 2007, p. 42.

¹⁷⁵ Chime, above n 25, pp. 1-2; Primus, above n 25, pp. 1-2.

¹⁷⁶ PowerTel and Request, above n 174, p. 24.

¹⁷⁷ Macquarie, *Unconditioned Local Loop Service (ULLS), Submissions of Macquarie Telecom in response to Telstra submission*, 13 September 2007, p. 1.

¹⁷⁸ PowerTel and Request, above n 174, p. 36.

¹⁷⁹ Chime, *Unconditioned Local Loop Service (ULLS), Reply submission of Chime Communications Pty Ltd (Chime), Part 2 – ULLS monthly charges*, 13 September 2007, p. 3.

¹⁸⁰ Primus, *Unconditioned Local Loop Service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus), Response to Part 3 of Telstra's Submission – ULLS monthly charges*, 13 September 2007, p. 3.

occur.¹⁸¹

277. Chime and Primus both note the ACCC's previous positions regarding the use of Historic Cost Accounting ("HCA") and CCA pricing approaches. They submit that it is very unlikely that any cost accounting based upon Telstra's CCA would do anything but entrench Telstra's inefficient costing, and as such is unlikely to encourage the efficient use of and investment in infrastructure. Chime and Primus support the ACCC's view in its ULLS pricing principles report that while CCA might provide some indication of a possible upper bound of access prices, it is not an appropriate pricing principle for the ULLS.¹⁸²
278. Similarly, Macquarie supports the ACCC's view in its ULLS pricing principles report that CCA is not a desirable pricing principle for the ULLS. Macquarie submits that some of the categories identified in the ACCC's letter of 30 November 2007 "would appear to be dubious" and that costs related to "other non-current assets" and "other current assets and related receivables" are extremely unlikely to have a direct nexus to the provision of ULLS. Macquarie submits that these categories should be disregarded for the purposes of the dispute.¹⁸³
279. PowerTel and Request note the ACCC's observations in its Supplementary Consultation Paper and the ULLS pricing principles report and submit that the ACCC ought to disregard Telstra's claimed CCA costs.¹⁸⁴
280. Optus submits that whilst in other circumstances CCA analysis might provide a useful basis for setting access prices, it should not be used in the case of ULLS given Telstra's position as a monopoly operator. Optus further submits that Telstra has put forward no evidence to suggest the costs in its CCA reports are efficient and that a number of cost items are of a general nature and would appear to have little relevance to the efficient provision of ULLS.¹⁸⁵

n/e/r/a model

281. Telstra has separately submitted that the ACCC should take into account the ACCC's previous cost model, the n/e/r/a model.¹⁸⁶ The n/e/r/a model is a model commissioned by the ACCC for assessing PSTN OTA prices in 1999 and modified for use in assessing ULLS prices in 2002.¹⁸⁷ Telstra notes that the n/e/r/a model estimated prices of around \$33 in 2000/01 and 2001/02, and submits that the model would demonstrate higher costs than those put forward by the ACCC. Telstra submitted that the ACCC had an obligation to "invoke its investigatory powers and update and

¹⁸¹ Telstra, above n 49, pp. 17-18, 21.

¹⁸² Chime, above n 25, pp. 1-2; Primus, above n 25, pp. 1-2.

¹⁸³ Macquarie, above n 25, p. 2.

¹⁸⁴ PowerTel and Request, above n 25, pp. 3-4.

¹⁸⁵ Optus, above n 25, p. 3.

¹⁸⁶ Telstra, above n 46, p. 39.

¹⁸⁷ ACCC, *Pricing of unconditioned local loop services (ULLS)—final report*, March 2002.

adjust the n/e/r/a model”.¹⁸⁸

282. In their reply submissions, PowerTel and Request submit that the Tribunal dismissed Telstra’s attempt to rely upon the n/e/r/a model.¹⁸⁹

International benchmarks

283. Telstra has also separately submitted that its averaged \$30 price falls at the middle to lower range of prices for the ULLS service, after adjusting prices for purchasing power parity and line density.¹⁹⁰ It also submits that the ACCC’s proposed draft prices are so low that they do not accord with international benchmarks.¹⁹¹
284. PowerTel and Request refer to the Tribunal’s views on international benchmarking, where the Tribunal stated that there were a number of factors that could explain prices in different jurisdictions, and that it was not satisfied that adjusting for purchasing power parity and line density accounted for all relevant factors.¹⁹²
285. Primus disputes Telstra’s submissions that Telstra’s proposed prices are more appropriate based on international benchmarks.¹⁹³ It submits that international benchmarks must be treated with caution, but submits that Telstra’s proposed price is out of line with the rest of the world. Chime makes an equivalent submission.¹⁹⁴
286. Macquarie submits that it disagrees with Telstra’s position that the ACCC’s proposed prices do not accord with international benchmarks. It also submits that the ACCC should reject Telstra’s contention that population density should be taken into account in comparing international benchmarks on the basis that Australia has one of the most highly urbanised populations in the world.¹⁹⁵

Access seeker criticisms of the PIE II model

287. Optus noted that the ACCC used the PIE II model as the basis for its determinations of network costs in the DFD, despite its previously expressed concerns and the concerns of the Tribunal.¹⁹⁶ Optus states that it has concerns about the ACCC’s approach and accordingly suggests a number of adjustments to the model.¹⁹⁷ Optus also raised adjustments and specific concerns with the model in its reply

¹⁸⁸ Telstra, above n 46, p. 40.

¹⁸⁹ PowerTel and Request, above n 174, p. 41.

¹⁹⁰ Telstra, above n 46, p. 54.

¹⁹¹ Telstra, *op cit*, p. 6.

¹⁹² PowerTel and Request, above n 25, p. 43.

¹⁹³ Primus, above n 25, pp. 1-2.

¹⁹⁴ Chime, above n 179, p. 4.

¹⁹⁵ Macquarie, above n 177, p. 3.

¹⁹⁶ Optus, above n 53, p. 8.

¹⁹⁷ Optus, *op cit*, pp. 8-19.

submissions.¹⁹⁸ These specific submissions are considered further below.

288. PowerTel and Request accept the ACCC's use of the PIE II model but note that they do not accept Telstra's methodology or estimation approach as embodied in PIE II, nor do they concede any previous criticisms of PIE II.¹⁹⁹ They also set out a number of criticisms of the model, and contend that it does not represent an efficient, forward-looking network used to supply ULLS.²⁰⁰ More specifically, they submit that the model has methodological defects, a lack of transparency and usability, that it is not forward-looking and that there are a number of problems with its input variables.²⁰¹
289. PowerTel and Request's reply submission also makes criticisms of the PIE II model and submits that Telstra has ignored the Tribunal's criticisms of the model.²⁰² PowerTel and Request make further criticisms of the model based on the Tribunal's comments, relating to both the model in general, roll-forward, selective parameters and exogenous adjustments.²⁰³
290. Chime questions the ACCC's approach to using Telstra's PIE II model.²⁰⁴ Chime noted that the ACCC has had a number of concerns with PIE II but has elected to use the model in the absence of an alternative cost model. Chime submits that the ACCC should make allowances for each of its concerns by applying an appropriate deduction to the PIE II cost estimates.²⁰⁵ Chime does not specify what it would consider to be appropriate deductions.
291. Primus makes similar comments to Chime.²⁰⁶ However it raises specific criticisms of PIE II raised by its consultants Gibson Quai-AAS in relation to dimensioning, asset lives and lead-in costs.²⁰⁷
292. Macquarie submitted that it supported setting ULLS prices with reference to network costs calculated using the PIE II model with revised ACCC inputs.²⁰⁸ However it submitted that the adoption of the PIE II model may be likely to result in an overestimation of the efficient network costs.

¹⁹⁸ Optus, *Unconditioned Local Loop Service (ULLS)*, Reply submission of Optus, 13 September 2007, pp. 15-25.

¹⁹⁹ PowerTel and Request, above n 53, p. 12.

²⁰⁰ Ibid.

²⁰¹ PowerTel and Request, *op cit*, pp. 13-19.

²⁰² PowerTel and Request, above n 174, p. 36.

²⁰³ PowerTel and Request, *op cit*, pp. 36-41.

²⁰⁴ Chime, *Unconditioned Local Loop Service (ULLS)*, Submission of Chime Communications Pty Ltd (Chime), Part 2 – Annual Charges, 16 August 2007, p. 1.

²⁰⁵ Chime, *op cit*, p. 2.

²⁰⁶ Primus, *Unconditioned Local Loop Service (ULLS)*, Submission of Primus Telecommunications Pty Ltd (Primus), Part 2 – Annual Charges, 16 August 2007, pp. 1-2.

²⁰⁷ Primus, *op cit*, pp. 2-3.

²⁰⁸ Macquarie, above n 53, p. 5.

293. In its reply submissions, Telstra submits that the PIE II model is an appropriate model for the estimation of ULLS network costs.²⁰⁹ It provides responses on the various specific criticisms made by access seekers about inputs or assumptions in the model.²¹⁰

TEA Model

294. On 17 December 2007, Telstra submitted that the ACCC should have regard to its pending Telstra Efficient Access (“TEA”) model.²¹¹ Telstra submitted that it was intending to submit an undertaking which was partially supported by the TEA model and submitted that the model was a superior model to PIE II.
295. Accordingly, Telstra submitted that the ACCC should have regard to the TEA model in the ULLS access disputes and undertake a further round of submissions to consider the model. Telstra submitted that such submissions were capable of being dealt with in a reasonable timeframe. Telstra further stated that it would maintain interim determination pricing for access seekers until such time as final determinations were made.
296. Optus opposed the ACCC having regard to the TEA model in the arbitrations.²¹² Primus also opposed the ACCC having regard to the TEA model in the arbitrations.²¹³
297. On 20 December 2007, the ACCC wrote to Telstra and the access seeker parties stating that it did not seek further submissions in relation to the TEA model from parties prior to its consideration of final determinations in the course of the current arbitrations, in light of:
- the very late introduction of the TEA model into the arbitration process
 - the need to resolve the access disputes in a timely manner
 - the fact that the TEA model has not been the subject of any external review and the likelihood that such review will take a considerable amount of time
 - the benefits of regulatory certainty

²⁰⁹ Telstra, above n 44, p. 3.

²¹⁰ Telstra, *op cit*, pp. 3-8.

²¹¹ Telstra, *Access Disputes – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra – ULLS*, 17 December 2007.

²¹² Optus, *ULLS Access Disputes – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra*, 18 December 2007.

²¹³ Primus, *Access Dispute – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra – ULLS*, 19 December 2007.

- the extensive consultation that had already been undertaken in relation to the issuing of final determinations in the disputes.

298. On 21 December 2007, Telstra submitted the TEA model (Version 1.0) into the arbitrations, along with an overview of the model and a preliminary report about the model, and made the section 152DK request discussed above in section 1.3. Telstra had also submitted the TEA model in support of an ULLS undertaking submitted to the ACCC on 21 December 2007. In the course of its assessment of the TEA model, the ACCC noted a malfunction in the TEA model and a lack of user manual and documentation setting out all underlying technical and engineering assumptions relating to the model. The ACCC discussed the malfunction orally with Telstra on 21 December 2007 and, in relation to the undertaking process, issued a section 152BT request on 3 January 2008 for a working version of the model, an explanation of the malfunction, a user manual and documentation on underlying technical and engineering assumptions. On 10 January 2008, Telstra supplied to the joint arbitration hearing a further version of the TEA model (Version 1.1) which sought to address the malfunction which had previously been identified by the ACCC. The user manual and documentation on underlying technical and engineering assumptions has not been provided.
299. On 4 February 2008, Telstra wrote to the ACCC inquiring as to why the ACCC did not intend to have regard to the TEA model given the ACCC's consultation on the finalised Layer 10 report. The ACCC responded to Telstra on 6 February 2008.

ACCC's views

Telstra's model compared to PIE II and the specific cost model

300. Telstra has proposed that the TSLRIC+ for Telstra's ULLS monthly charges can be estimated from particular data drawn from its RAF reports that have been prepared on a CCA basis.
301. Accounting data can provide a useful starting point for deriving TSLRIC+ based access charges. The ACCC has regard to replacement costs in estimating network costs using Telstra's PIE II model. However, the ACCC has not previously accepted the use of unadjusted CCA, or HCA data, as a basis for estimating the TSLRIC+ of a service.
302. Recently, the Tribunal cautioned against the use of CCA data concerning Telstra's CAN for the purpose of deriving a TSLRIC measure of the ULLS:²¹⁴

The Commission contended that Telstra's current costs were of little or no relevance to our assessment of Telstra's proposed \$30 monthly charge because current costs reflected neither the actual network costs incurred by Telstra in supplying the ULLS nor the efficient forward looking network costs of supplying the ULLS. Telstra submitted that the current costs were a better

²¹⁴ *Telstra Corporation Ltd (No 3) [2007] ACompT 3 (17 May 2007).*

reflection of the costs that an access seeker would incur today if it were to supply the ULLS than historic costs, as they reflected the purchase price of assets today.

We do not consider that the current cost of building an existing CAN is necessarily likely to be an accurate guide to the forward looking TSLRIC of providing the ULLS. It is not clear to us that an access provider building a network today would choose the same assets as it uses in its current network. We do not accept that Telstra's current cost estimate of providing the ULLS constitutes sufficient evidence as to the likely TSLRIC of providing the ULLS, nor, therefore, to the reasonableness of Telstra's ULLS access charge for the periods covered by the undertakings.

303. The ACCC notes the parties hold conflicting views as to whether the Tribunal's comments are applicable here. The ACCC considers that the comments are applicable, and that they caution against the adoption of CCA data as a measure of efficient, forward-looking costs. The ACCC notes that Telstra submits that its model uses a TSLRIC+ calculation.²¹⁵ The ACCC does not consider that the inherent limitations of CCA cost data to measure efficient forward-looking costs can be overcome simply by annualising the cost data. The annualised costs are still likely to be inflated above efficient, forward-looking levels.
304. Nor does the fact that the CCA reports are prepared by Telstra under a rule that the ACCC has issued (pursuant to a Ministerial direction to do so) mean that the CCA balances would represent TSLRIC+ values. Similarly, an external audit of Telstra's compliance with the rule does not provide any assurance that the resulting accounts are representative of TSLRIC+ values.
305. Similarly, the ACCC considered in its pricing principles that the use of CCA data could be problematic:²¹⁶

Prices based on a CCA methodology will be unlikely to encourage the efficient use of and investment in infrastructure. CCA assumes current technology, as opposed to best-in-use technology. Accordingly it will incorporate existing inefficiencies, but price this inefficient technology at higher current prices. Where HCA-based prices might at least inform as to the level of cost recovery needed to ensure the access provider's legitimate business interests, CCA does not achieve this. Furthermore, CCA is a static analysis that does not provide a measure of forward-looking costs and is hence of limited benefit in considering future pricing. These concerns are particularly relevant for a long-established network such as Telstra's CAN, which has been deployed over a number of years.

The ACCC also notes the data limitations of accounting data, as discussed above. While Telstra's Regulatory Accounting Framework (RAF) data is provided in accordance with the reporting requirements set out in the RAF,

²¹⁵ Telstra, above n 20, p. 2.

²¹⁶ ACCC, above n 5, p. 10.

the relevant Record Keeping Rules (RKR) do not set out in detail how costs relating to a particular service should be allocated. Rather, the RKR provide general principles and 'high level' allocation methods which telecommunications carriers can apply in a number of different ways. The ACCC does not accept or reject a particular carrier's cost allocation method or assess the efficiency of the resulting cost allocation, it merely raises issues where there is non-compliance with the high-level principles set out in the RKR. Accordingly, there may be an absence of reliable accounting cost data attributed to particular services on which to base a CCA approach, even if total cost amounts were appropriate.

306. The ACCC has reviewed the CCA data that Telstra submitted. As discussed below, the ACCC does not consider that these data would support an increase to the TSLRIC+ measure above the level proposed by the ACCC.
307. Telstra has also submitted that the ACCC should have regard to Telstra's actual costs as well as the TSLRIC+ measure in setting ULLS monthly charges. The ACCC does not consider that ULLS monthly charges should be set by reference to actual costs. This is consistent with the position long held by the ACCC and Tribunal.
308. In any case, Telstra's CCA balances do not record Telstra's actual costs, as they measure costs on the premise that Telstra was required to rebuild its network and repurchase capital equipment it already owns, and that the rebuilt network and purchased capital equipment would be of the same type as that operated today. Unlike TSLRIC+ measures, however, Telstra's model costs the existing technology and capital equipment, and not the capital that would be efficiently deployed. As a result, CCA measures overstate actual costs, and also TSLRIC+ measures.
309. As Telstra notes, the CCA totals are above the TSLRIC+ values used in the cost models that the ACCC circulated to the parties. While Telstra points to this to question whether the values produced by the ACCC provide a reasonable or credible TSLRIC+ measure, the opposite conclusion could equally be drawn from the discrepancy. That is, the discrepancy could reinforce the view that CCA balances will tend to overstate TSLRIC+ measures.
310. Further support for this view arises from Telstra's CCA balances exceeding the TSLRIC+ measures that Telstra has advocated in prior regulatory proceedings (and, as submitted by access seekers, the \$30 ULLS price that Telstra is advocating). In this regard, the ACCC notes that data contained in the specific cost model that it circulated are values that Telstra itself advocated in previous regulatory proceedings. The data are contained in TSLRIC+ models that Telstra then advocated for specific costs, inclusive of an allowance for efficiently incurred indirect costs, for the LSS and the ULLS in previous regulatory proceedings. In this regard, the operating and maintenance expenses, capital costs, mark-ups for indirect costs and demand data for the LSS and the ULLS are sourced from TSLRIC+ models annexed to the statement of Andrew Briggs of August 2006. Similarly, the network costs put forward by the ACCC were based on Telstra's PIE II model with some revised ACCC inputs.
311. Telstra points to TFP studies to support its view that its CCA balances are likely to represent efficient, forward-looking levels incurred. However, the ACCC does not

consider that a TFP study can support Telstra's submission that these costs were efficiently incurred. TFP is the ratio of the change of outputs to inputs, generally over time, or in respect of one aspect of Telstra's submissions, across businesses. High TFP growth can be influenced either by cost efficiency or scale economies from demand surges, or by reductions in inefficiencies over time, or as compared to other businesses.

312. Furthermore, in the context of ULLS pricing, the relevant question is the extent to which the business-wide TFP value or fixed-line TFP value imply forward-looking efficiencies in the provision of the ULLS. Firstly, the ACCC considers that business-wide TFP incorporates significant other investments that are not relevant to the ULLS. Notably, the output categories specified by Telstra include revenues relating to services unrelated to the ULLS, such as local calls, switched access, long distance and mobile services.²¹⁷ While the CAN could be expected to make up a significant part of Telstra's overall assets, the inclusion of non-fixed-line services and significant fixed-line services not related to the ULLS limits the relevance of the results.
313. The ACCC further notes that Telstra has updated an ACCC fixed line TFP methodology used for assessing TFP measures for use in a retail price control report.²¹⁸ Similarly, the services included in that study cover the entire fixed-line network, reflecting services that use both the CAN and inter-exchange network ("IEN") and including non-voice services such as ADSL.²¹⁹ Telstra's update similarly includes a wide range of fixed line services. Again, the ACCC considers that the wide range of services included limit the relevance of the results.
314. Telstra also contends that the ACCC should infer that all its costs were efficiently incurred if it reports strong TFP growth, including costs such as these that are immaterial to its TFP measures. The ACCC does not accept that such an inference can reasonably be drawn. TFP is a relative measure of efficiency compared to previous efficiency, using historical data, but does not particularly provide insight into absolute efficiency. In particular, the ACCC does not consider that the TFP results can demonstrate that the network is efficiently designed or forward-looking. The TFP measures simply examine the efficiency of use of the network as it exists. The ACCC notes Telstra's submission that its studies provide comparisons of absolute productivity, but considers that the results present difficulties. For example, the ACCC notes that adjusting for line density may not be appropriate without accounting for line distribution.
315. The ACCC notes that Telstra has submitted that concerns about the efficiency and relevance of current cost information can be addressed by examining the omitted asset bias and obsolete asset bias in the data (which would respectively cause current costs to underestimate and overestimate replacement costs).²²⁰ It also provides an analysis that it submits show that the current costs understate the replacement

²¹⁷ Telstra, above n 46, p. 36, Annexure 9; Telstra, above n 49, Annexure 1.

²¹⁸ Telstra, above n 46, p. 49, Annexure 10.

²¹⁹ ACCC, *Review of Telstra's price control arrangements—an ACCC report*, February 2005, p. 120.

²²⁰ Telstra, above n 49, p. 27.

costs.²²¹ The ACCC considers that the analysis does not demonstrate that the data understates replacement costs.

316. In particular, the ACCC notes that in estimating the omitted asset bias, Telstra scales up the amount of assets in its accounts based on the number of services in operation (“SIOs”) in the initial year that the assets were first accounted for in Telstra’s accounts. The ACCC considers that this may significantly overstate the appropriate mark-up as it accounts for assets that “could also be used for the operation of the CAN in 2005/06”.²²² The ACCC considers that this takes no account for what assets are actually used or would be needed in an efficient forward-looking network structure. Further, Telstra’s calculation of the omitted asset bias only excludes assets that are listed as abandoned in Telstra’s physical asset database. The ACCC considers that this does not recognise the inefficiencies in the existing network that continue to operate, and that it does not account for assets that would actually no longer be needed in an efficient forward-looking network structure.
317. Based on the above analysis, the ACCC does not consider that the CCA costs provide a reliable measure of the relevant TSLRIC+ of the ULLS, or that it is the best available measure before the ACCC.
318. Accordingly, the ACCC has continued to use Telstra’s previously submitted TSLRIC+ cost models, in preference to its CCA account balances, in specifying ULLS monthly charges in the final determination.
319. It can be noted that Telstra’s claimed costs in its bottom-up TSLRIC+ models have also not been shown to have been efficiently incurred. Certain access seekers have made submissions along those lines, particularly criticising the PIE II model. The possibility therefore remains that inefficient costs could be admitted into the cost base through the use of those two cost models. However, the extent to which admitted costs would exceed efficient costs is much more limited under this approach, given that a TSLRIC+ methodology was used and the comparative level of sophistication in modelling techniques. This is reliant on appropriate inputs being used in the models. The ACCC notes that the appropriate inputs have been the subject of significant debate in the past. The ACCC assesses particular inputs into the model in more detail below.
320. That said, the ACCC notes that access seeker parties all had a number of criticisms relating to the PIE II model. However, they all also submitted that it would be appropriate to use the model in setting prices for these final determinations. Similarly, Telstra also submitted that the PIE II model is an appropriate model for the estimation of ULLS network costs. The ACCC believes that, with reservations and appropriately considered inputs, the PIE II model can be used to set prices in this final determinations.

Specifics of Telstra’s CCA cost claim

²²¹ Telstra, *op cit*, p. 56, Annexure 11.

²²² Telstra, *op cit*, p. 57, Annexure 11.

321. The ACCC has decided not to adopt Telstra's CCA balances in setting ULLS monthly charges in this arbitration on the basis that the CCA methodology overstates TSLRIC+ values.
322. In recent LSS final determinations, the ACCC has also raised other concerns about particular cost categories claimed by Telstra in estimating LSS costs using CCA data. In particular, the ACCC concluded that, as Telstra's cost claim and the underlying regulatory accounts have been prepared on a fully distributed cost ("FDC") basis, adopting the CCA values would risk introducing cost categories to be recovered through LSS charges even though they have no relationship with the supply of the LSS.²²³ The ACCC considered that such cost categories would overstate efficient costs, as they introduce cost categories unnecessary to the supply of the LSS. Further, in a competitive market, a supplier of the LSS would be unable to recover a portion of these costs in LSS access charges, as other LSS suppliers would be able to offer lesser charges.
323. In particular, the ACCC expressed concern about asset categories such as current accounts receivables, long term investments and 'other assets not expected to be developed, utilised or received within the next twelve months and which have not already been included', where the relationship of the asset items to provision of the LSS was not clear.
324. The ACCC asked parties to the ULLS arbitrations in its supplementary consultation paper about whether similar concerns were evident here.
325. The concerns expressed in the LSS final determinations about inappropriate asset categories are perhaps less relevant to the ULLS case. This is because by far the largest categories of assets (around [c-i-c] per cent) are either CAN ducts and pipes or CAN copper cables. The ACCC considers that the relevance of these cost categories to the provision of the ULLS is not controversial (although as noted above, it does not consider that the level of costs claimed will be efficient or forward-looking).
326. However, the ACCC notes that, for the small level of organisational assets, but more relevantly for the expense categories claimed, using CCA data may be of a concern given that the particular assets or expenses are not ones that have been identified as being directly caused by the ULLS, but rather comprise a share of a higher level cost pool. Including Telstra's claimed CCA balances would risk admitting costs at a level that are not representative of TSLRIC+ levels.
327. There are two reasons for this. The FDC approach may use allocators that do not align with incremental costs of the ULLS, and/or a reasonable allocation of overheads necessary to the supply of the ULLS. This risk is increased given that the relevant CCA expense amounts for the ULLS are comprised entirely by allocations made from higher-level cost pools, and not directly allocated costs. For instance, Telstra's claimed marketing and sales expenses represent a share of Telstra's marketing and

²²³ See, for example, ACCC, *Access dispute between Chime Communications and Telstra—LSS—publication of final determination and associated statement of reasons*, Jun 07, published 8 August 07, available at <http://www.accc.gov.au/content/index.phtml?itemId=793060>, p. 39.

sales expenses for a pool of services, and not expenses that have been identified as being caused by marketing of the ULLS. Telstra agrees that certain of those marketing costs that had been allocated to ULLS could be seen as costs that would not be incurred by a provider of the ULLS, although it submits that the level of costs is immaterial.²²⁴ The ACCC notes that all of the other expense categories are only allocated from higher-level cost pools and similar cost categories unrelated to the ULLS could be included in the claimed cost categories.

328. Similarly, within the small class of organisational assets, the ACCC noted to the parties that it is not clear why “other assets not expected to be developed, utilised or received within the next twelve months and which have not already been included” or “all other current assets held for conversion within the next twelve months and not already included except for cash and short term investments” are relevant to the ULLS. Telstra submits that these are appropriate items to be incurred, submitting that the first category largely relates to completed software assets and that the second relates largely to prepaid operating expenditure, inventory balances and deferred expenditures on connections or installations. It removes the last category in its updated model. Telstra submits that all of these values would be incurred by any provider of ULLS. However, the ACCC notes that, for example, while the ULLS clearly requires some software assets, the amount recorded for software assets do not relate to the ULLS in particular, but are a portion of software assets generally. The ACCC considers that its concerns remain about the usefulness of CCA data for TSLRIC+ modelling.
329. Secondly, as noted previously, current cost accounts have the potential to update the prices of existing equipment, including adopting costs associated with modern equivalent assets for assets no longer commercially available. However, as noted by the Tribunal, the claimed balances may not represent efficient forward-looking levels, as they reflect investment choices which may never have been representative of efficient decisions or no longer represent efficient choices. Accordingly, the ACCC considers that CCA values assigned to the cost pools will overstate TSLRIC+.
330. Telstra has submitted that the class of asset categories that might more obviously include unnecessary assets is small. The ACCC agrees with this. However it notes that even for the CAN asset categories, the asset balances largely consist of allocated rather than direct costs. Telstra also submits that there is no evidence that its cost claim includes cost categories that are inefficient, unnecessary to the supply of the ULLS, or relate to downstream or other services.²²⁵ Telstra asserts that its allocations are made in accordance with the RAF. As noted in the ACCC’s pricing principles report, the ACCC does not accept that making allocations in accordance with the RAF will lead to CCA data providing a TSLRIC+ measure.
331. Lastly, the ACCC noted to the parties in its supplementary consultation paper that there is the potential for claimed costs to be recovered in other charges, and that any such costs that are recovered in other charges should be excluded from the cost pool to be recovered from ULLS monthly charges. The ACCC identified Telstra Exchange

²²⁴ Telstra, above n 20, p. 5.

²²⁵ Telstra, *op cit*, p. 11.

Building Access (TEBA) charges, and cable interconnection charges as possible examples of other charges that recover in part the claimed costs. The ACCC notes Telstra's submission that, regarding "TEBA and cable interconnection charges", costs are allocated in accordance with Regulatory Accounting Rules, the CCA allocates a positive amount of accommodation and property costs to facilities access that CAN assets and costs are not allocated to facilities access services and TEBA and cable interconnection charges do not seek to recover CAN costs.²²⁶ However, as noted above the ACCC does not accept that making allocations in accordance with the RAF will lead to CCA data providing a TSLRIC+ measure.

Assessment of the use of Telstra's model and PIE II/specific cost model against subsection 152CR(1) matters and pricing principles

332. Given the above analysis, and after having regard to the subsection 152CR(1) matters as discussed below, the ACCC has decided not to use Telstra's model and has decided to utilise the models it proposed to the parties in its consultation paper for calculating ULLS costs. The ACCC considers that using its specific cost model and a PIE II model with appropriate inputs will better lead to costs that reflect the section 152CR(1) matters.

Paragraph 152CR(1)(a)

333. In terms of applying the subsection 152CR(1) criteria, the first criterion concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c) and subsection 152 AB(7A)).
334. As discussed previously, the ACCC considers that access charges that represent the forward-looking costs of an efficient provider best promote competition. The ACCC's pricing principles make this clear in the adoption of a TSLRIC+ methodology. This is because, over the long run, forward-looking efficient costs lead to conditions which allow the access provider and access seekers to compete in downstream markets on their relative merits. The ACCC considers that its preferred models are more consistent with this outcome, and so would better promote competition. The ACCC does not consider that CCA balances reflect forward-looking costs as they reflect past investment decisions that are not assessed for relevance or adjusted for efficiency.
335. An efficient access provider would incur certain costs of the type Telstra has claimed; the question is whether the level of costs are those of an efficient operator of the ULLS. The ACCC considers that Telstra's original cost claim for the ULLS, that Telstra prepared using bottom-up TSLRIC+ models and which were used in proposing the DFD, lead to more appropriate estimates of the efficiently incurred costs of the ULLS. Although there is the potential for some inefficiencies to occur in

²²⁶ Telstra, *op cit*, pp. 11-12.

these models, the use of a TSLRIC+ bottom-up methodology and the comparative level of sophistication in modelling techniques would likely result in costs closer to efficient levels.

- 336. Comparatively, the ACCC is not satisfied that the level of costs claimed in the Telstra alternative model are an efficient forward-looking level of costs, nor that all the expense and asset categories are relevant to provision of the ULLS.
- 337. Accordingly, the ACCC considers that its proposed approach would better promote competition.
- 338. The ACCC considers that the choice of models used would not affect any-to-any connectivity.
- 339. The ACCC considers that its models will better lead to efficient investment decisions. By setting prices that better reflect forward-looking efficient costs, the ACCC considers that parties will make more appropriate build/buy decisions and better promote efficient investment. By providing for a risk-adjusted rate of return, the ACCC has regard to the risks involved in investing.
- 340. The ACCC considers that accepting Telstra's model is unnecessary to meet Telstra's legitimate commercial or business interests, including its interest in recovering its direct costs of supplying the ULLS or exploiting economies of scale or scope in the provision of ULLS and CAN-based services. The ACCC considers its proposed approach is sufficient to meet these interests, as the level of costs that Telstra incurs in supplying the ULLS is less than those claimed in its model. The ACCC's proposed approach accounts for all of the costs that are likely to be incurred in the provision of the ULLS.

Paragraph 152CR(1)(b)

- 341. This criterion concerns the legitimate business interests of the provider and its investment in facilities used to provide the ULLS (paragraph 152CR(1)(b)). This criterion is discussed as part of the first criterion. The ACCC considers that its approach is consistent with Telstra realising its legitimate business interests, such as recovering its costs of providing access and a normal, risk-adjusted return on its investment.

Paragraph 152CR(1)(c)

- 342. This criterion concerns the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The access seekers' interests lie in being able to compete on their relative merits. The ACCC considers its approach best meets this criterion, as access seekers pay access charges based on the efficient forward-looking cost of supplying the ULLS. Telstra's proposed approach would not, as it would tend to inflate ULLS access seekers' cost base above TSLRIC+ and relative to Telstra's cost base. This would be detrimental to access seeker' interest and impede their ability to enter markets and supply downstream services.

Paragraph 152CR(1)(d)

343. This criterion concerns the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs of providing access, to itself or others. As noted above, the ACCC considers that its approach of using the PIE II and specific cost models will be sufficient to meet the direct costs of the ULLS. The ACCC's proposed approach accounts for all the costs that are likely to be incurred in the provision of the ULLS.

Paragraphs 152CR(1)(e) & (f)

344. The cost of extensions to Telstra's ordering systems necessary to supply the ULLS (and equivalent services) are taken into account within the ACCC's specific cost model. The ACCC does not consider that the 'operational and technical requirements' criterion materially contributes to this decision.

Paragraph 152CR(1)(g)

345. The ACCC has also considered the objective of enabling a carriage service, telecommunications network or facility to be operated efficiently. The criterion in paragraph 152CR(1)(g) calls for consideration to be given, in this instance, to services, networks and facilities associated with the ULLS and downstream voice and DSL services, of the access provider, the access seeker, and any other downstream service providers. The ACCC considers that its proposed approach strikes the best balance. It will lead to conditions that make competition in downstream DSL services more likely, which will in turn encourage efficiencies in markets for those services.
346. Turning to the ULLS pricing principles, the ACCC considers that its approach best meets these principles. Although Telstra considers its alternative model can approximate the TSLRIC+ of providing the ULLS, as noted above, the ACCC considers that Telstra's approach will significantly overstate TSLRIC+ of the ULLS. It notes the conclusions of its pricing principles report in that regard.²²⁷ Further, Telstra's approach appears inconsistent with the requirement in the pricing principles, to have express regard to LSS and ULLS specific costs, and the equivalent costs of internal supply of these inputs.

n/e/r/a

347. Telstra has advocated the use of the ACCC's n/e/r/a model, while PowerTel and Request submitted that no regard should be had to the model. Telstra asked for access to the model a number of times during the course of the arbitrations (2 March, 19 March, and 19 October). In its initial submission in response to the DFDs Telstra submitted that the ACCC had an obligation to update and adjust the n/e/r/a model.
348. In its response to Telstra in the course of this arbitration, the ACCC stated that it considered that using a model based on what are now outdated data and modelling

²²⁷ ACCC, above n 5, p. 11.

techniques would not be appropriate for the purposes of resolving this access disputes. The ACCC noted that it was not proposing to use the model in setting prices in the course of the arbitration and has not used the model in its regulatory price-setting or price-assessing roles since 2002. Accordingly the ACCC considered that there was no need to have access to the model.

349. The ACCC maintains the view that the n/e/r/a model is not relevant in this arbitration, to decisions on ULLS costs or to setting monthly prices in the final determination. The ACCC notes that the Tribunal reached the following conclusion about the use of the n/e/r/a model:²²⁸

The Commission contended that the adjusted NERA model no longer reflected best practice and was significantly out of date as it had not been updated since 2000/2001. In a submission to the Commission dated 25 July 2004, Telstra accepted that the NERA model was significantly out of date and no longer provided any meaningful insight into the cost of its network.

In the light of this acknowledgement by Telstra, we are not satisfied that the NERA model adequately models the current ULLS network costs or that the model provides a reasonable estimate of the efficient network costs associated with providing the ULLS for the periods covered by the undertakings.

350. The ACCC considers that, in light of its and the Tribunal's views on the n/e/r/a model, that the ACCC should not have regard to the model in setting ULLS prices. As discussed earlier in these reasons, the ACCC considers that an adjusted PIE II model can be used to provide a reliable measure of the TSLRIC+ of the ULLS in the bands that are the subject of the final determination. Accordingly, the ACCC does not need to develop another model to do this. The ACCC does not consider that it is under any obligation to update and adjust the n/e/r/a model in these circumstances. The n/e/r/a model would not lead to prices that accord with the relevant statutory matters in section 152CR of the TPA.

International benchmarks

351. Finally, Telstra submits that regard should be had to international benchmark prices for the ULLS, adjusted for population density and purchasing power parity. Access seekers oppose this.
352. The ACCC notes that it is valid to have regard to international examples and that this can in certain circumstances provide useful information. However, the ACCC noted the following in its ULLS pricing principles report about using international benchmarks to directly assess prices between jurisdictions:²²⁹

In general, the ACCC considers that international benchmarking should be used cautiously in informing regulatory pricing decisions. In particular,

²²⁸ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [376].

²²⁹ ACCC, above n 5, p. 11.

before international benchmarks might be useful, the ACCC would need to be satisfied that, notwithstanding differences between Australia and the relevant international jurisdictions, the international benchmarks are reasonable comparators. Relevant differences may include matters such as the definition of the regulated service, the applicable regulatory framework, the geographic price structure, the cost of capital, the prescribed cost standard (if any) and population concentration and distribution (as opposed to population density). Accordingly, the ACCC considers that international benchmarks are often of limited informative value.

353. The ACCC considers that its conclusion in its pricing principles report is equally valid in the current context. In particular, the ACCC notes that Telstra adjusts prices for population density only. However, the ACCC considers that population concentration and distribution are particularly relevant to the Australian context.
354. Having regard to these views, the ACCC does not propose to use international benchmarks in setting monthly prices in these access disputes.

TEA model

355. The ACCC notes Telstra's letter of 17 December 2007 that the ACCC should have regard to Telstra's TEA model. While the ACCC welcomed the development of the TEA model by Telstra, it did not consider that it would be appropriate to delay the final determinations to assess the model in the context of these arbitrations. The ACCC conveyed this view to the parties in its letter of 20 December 2007.
356. The ACCC considers that its experience with modelling using models such as PIE II and the n/e/r/a model has shown that network cost modelling can take a significant time to resolve. The ACCC notes that the TEA model is as yet untested, that the model applies only to one Band and that the model has not been the subject of any comprehensive review by parties external to Telstra. Accordingly, the ACCC considers that resolving issues with the implementation of the new TEA model could take considerable time and would be likely to continue significantly beyond the currently planned expiry date of the final determinations. Accordingly, the ACCC anticipates that there would be significant delay in the making of final determinations in the disputes were the ACCC to defer the making of final determinations. In that regard, the ACCC notes that section 152CLA requires the ACCC to have regard to the desirability of access disputes being resolved in a timely manner.
357. The ACCC notes that Telstra stated in its 17 December letter that it was prepared to reinstate and maintain pricing in interim determinations until the ACCC makes final determinations. Telstra has submitted that this will prevent any prejudice to access seekers. However the ACCC notes that access seekers also have a significant interest in the regulatory certainty afforded by a final determination. In that respect, the ACCC notes that a number of the access disputes have been running for a significant length of time, in some cases over two years.
358. Following Telstra's submission of the various TEA models (Version 1.0 on 21 December 2007 and Version 1.1 on 10 January 2008) to the arbitrations, the ACCC has again considered whether to have regard to the TEA model in this arbitration.

The ACCC considers that the issues it identified in its 20 December letter still apply. Further, the ACCC notes that not all the identified issues with the model have been appropriately addressed.

359. Similarly, the ACCC wrote to the parties on 6 February 2008 in response to a Telstra query about having regard to the TEA model. The ACCC's letter noted that Telstra was continuing to revise the TEA model, and that a user manual and supporting documentation had not yet been provided. The ACCC also stated that it considered that resolving issues with the implementation, consideration and external review of the TEA model will take, at a minimum, many months even if and when a finalised model, user documentation and completed supporting information were provided to the ACCC and the parties.
360. Telstra had also submitted two versions of the TEA model (on 21 December 2007 and 7 January 2008) to the ACCC in support of a ULLS undertaking lodged with the ACCC on 21 December 2007. Telstra subsequently withdrew that undertaking on 3 March 2008 and submitted another ULLS undertaking with a third version of the TEA model on the same date. However, Telstra did not seek to have this third version of the model considered in the arbitrations.
361. In summary, in light of:
- the very late introduction of the TEA model into the arbitration process
 - the need to resolve the access disputes in a timely manner
 - the fact that the TEA model has not been the subject of any external review and the likelihood that such review will take a considerable amount of time
 - the benefits of regulatory certainty
 - the extensive consultation that has already been undertaken in relation to the issuing of final determinations in the joint arbitration hearing

the ACCC has determined that it will not have regard to the TEA model for the purposes of the current arbitration.

4.1.8 Network costs

Introduction

362. Network costs are one of the two cost components recovered in ULLS monthly charges. Network costs refer to the capital, operational and maintenance, and indirect costs of Telstra's fixed line network. In particular, for the ULLS, the relevant efficient network costs are the efficient costs attributable to the copper lines between the end-user and the exchange.
363. In prior regulatory proceedings, a number of separate issues that influence (to varying

degrees) the measurement of ULLS network costs have been raised for consideration. The ACCC's views on these matters are discussed below.

364. As noted above, and consistent with the ACCC's preparedness to accept alternate methods for an access provider to put forward material about its efficient costs, the ACCC considers that it is appropriate to use the PIE II model, with appropriate inputs, to estimate network costs for the purpose of setting ULLS monthly prices.
365. The PIE II network cost model was first submitted by Telstra to the ACCC in January 2003 in support of Telstra's undertakings for PSTN originating and terminating access and ULLS. Since that time, the ACCC has attempted to work with Telstra to overcome concerns about:
- the model's lack of transparency
 - users' inability to manipulate the model
 - the model's overestimation of network costs in regional and rural areas (particularly in Band 4)
 - Telstra's unwillingness to change the model as a result of the ACCC's and industry's concerns.
366. As noted in the consultation paper, the ACCC most recently set out those concerns in its August 2006 final decision on Telstra's ULLS monthly charge undertaking from December 2005.²³⁰ The ACCC also expressed particular concerns in that report about issues such as network provisioning, operational and maintenance factors, network planning costs, trench sharing, network design parameters and the annualisation of capital costs.
367. The ACCC notes that Telstra has recently been conducting further modelling work that may seek to address the ACCC's concerns. However, despite attempts to work with Telstra on modelling issues, a number of ACCC concerns with PIE II have not to date been addressed by Telstra.
368. The ACCC can make changes to some inputs to the PIE II model - such as the Weighted Average Cost of Capital (WACC) inputs - that address significant concerns. Further, although the ACCC has commissioned a fixed network cost model that it anticipates will be available in mid 2008, the ACCC is yet to develop an alternative cost model in preference to the PIE II model. Similarly, various access seeker parties submitted on the lack of transparency and usability of the PIE II model, although Telstra submitted that these concerns about transparency were unfounded.²³¹ The ACCC continues to hold concerns about the transparency of the model. However, given the need to resolve this disputes in a timely and efficient manner, the ACCC considers that it would not be appropriate to wait until an alternative cost model is

²³⁰ ACCC, above n 36, Appendix B.

²³¹ Telstra, above n 46, p. 82, Annexure 13.

available and tested.

369. Accordingly the ACCC has used the PIE II model with the ACCC's preferred inputs to set prices for the final determinations, despite its concerns. The ACCC considers that this is a conservative position likely to lead to an estimate of efficient network costs that is higher than if all the ACCC's concerns were fully addressed.
370. In assessing particular modelling assumptions the ACCC must have regard to the section 152CR matters. The ACCC considers that this will be achieved by considering whether cost assumptions and inputs better lead to an estimate of the efficient forward-looking network costs of the ULLS. The ACCC considers that such assumptions and inputs resulting in efficient forward-looking network costs will:
- better promote the LTIE, as they will better promote competition and encourage the economically efficient use of and investment in infrastructure. The ACCC considers that efficient cost-reflective prices will allow access seekers and Telstra to compete on the basis of their relative efficiencies, and allow for appropriate build/buy decisions
 - allow Telstra to recover amounts necessary to protect its legitimate business interests, but not more than necessary. The ACCC also considers that efficient cost-reflective prices will allow Telstra to exploit the economies of scale and scope inherent in its network
 - allows access seekers to compete on their merits
 - reflect the direct costs of providing the ULLS
 - allow the recovery of sufficient costs to ensure the safe and reliable operation of the network.
371. The ACCC does not consider that the matter in paragraph 152CR(1)(e) is likely to be a material considerations in the consideration of network costs.
372. As discussed below, the parties have made submissions on various aspects of the use of the PIE II model, appropriate inputs and possible adjustments to the model's costs. Telstra has also submitted with its initial submissions a revised version of the model that seeks to address several criticisms of the model made by the Tribunal about the years modelled by PIE II. The ACCC considers these issues in turn below.

Years modelled by PIE II and the need for “roll-forward”

373. Telstra's PIE II model was originally designed to provision a network and calculate network costs for the period 2001-02 to 2004-05. Accordingly, the model as provided to the ACCC at the time of the DFDs was incapable of modelling a network for the years relevant to the access disputes. Accordingly, to calculate costs for 2005-06, 2006-07 and 2007-08, which are the years relevant to the access disputes, a procedure was required to take costs from years up to and including 2004-05 and extrapolate

them to 2005-06 and beyond.

374. In submissions supporting its December 2005 ULLS undertakings, Telstra provided a Microsoft Excel spreadsheet that it had used to calculate network costs for the years of its undertakings (2005-06 to 2007-08).²³² Telstra's approach was to estimate a model for the 2004-05 financial year, and then alter the prices for that 2004-05 network by use of the "Scenario costing" page in the PIE II model.²³³
375. The Tribunal raised two primary concerns with the approach used by Telstra:²³⁴
- the PIE II model uses a distribution of addresses as at October 2000
 - the Telstra approach assumes that the aggregate number of SIOs remains at 2004/2005 levels.
376. The Tribunal accordingly criticised the model on the basis that it was "not satisfied that the PIE II model depicted the dimensions of Telstra's CAN or its ULLS network for any of the years to which the undertakings relate".
377. Informed by the Tribunal's comments, the ACCC's preliminary view was that Telstra's approach from its undertaking submissions was not the most appropriate method to calculating network costs for 2005-06 onwards. In particular, Telstra's approach assumed a static network – ie. that the number of lines remains the same as that in 2004-05.
378. The ACCC considers that it would be more appropriate to assume that the size of the network is changing, in accordance with observed and forecast trends. However it did not have access to a version of the model that could run for 2005-06, 2006-07 and 2007-08, nor was it in a position to update the model to do so, given the well-documented issues with the transparency and manipulability of the model.
379. Accordingly the ACCC's preliminary view, as set out in its consultation paper, was that a better approach to estimating costs for 2005-06 and onwards would be to:
- estimate networks for 2002-03, 2003-04 and 2004-05
 - calculate costs for those networks using appropriate WACC assumptions
 - calculate costs for subsequent years by extrapolating the trend in ULLS prices from the three years estimated.
380. The ACCC considered that this approach better reflected the trend in SIOs in Telstra's network over time. The ACCC's preliminary approach was designed to

²³² Telstra, "PIE II Rollforward new ULLS.xls" model, as submitted to the ACCC on 14 March 2006

²³³ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [341] to [348].

²³⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [356].

reflect trends in both prices **and** demand, as opposed to Telstra's approach which only reflected trends in prices.

381. The ACCC noted that its proposed approach would not directly address the Tribunal's concerns about population growth patterns and the distribution of lines in the network. In its consultation paper, the ACCC sought submissions from the parties on this particular issue as well as on its proposed approach generally.
382. The ACCC also did not adjust SIO, call and minutes of use ("MOU") demand figures in the model on the basis that there was a lack of apparent data on which the changes could be made, that call costs would have minimal effect on ULLS costs and that it may be inconsistent to only adjust SIO figures while not changing call data.

Submissions from parties

383. The parties' views on particular inputs are discussed separately. The following discussion deals with views on the issue of the years for which prices are set in the final determination.
384. Optus considered that the ACCC's proposed approach was a reasonable and pragmatic one and accepted the ACCC's position on demand.²³⁵ PowerTel/Request also accepted the ACCC's proposed approach.²³⁶ Chime, Primus and Macquarie did not specifically address this point.
385. Telstra objected to the ACCC's approach.²³⁷ Despite not having previously indicated to the ACCC that the PIE II model could be updated in such a way as to more directly address the Tribunal's concerns, or presenting an updated model in the course of the ACCC's previous undertaking process, Telstra criticised the ACCC's failure to make adjustments to the underlying data in the model. Telstra criticised the fact that the ACCC had used customer locations from 2001, SIO distributions from 2001, SIOs, MOUs and call volumes from 2002, an old US\$ exchange rate, old exchange service area ("ESA") banding and old ULLS demand proportions.²³⁸
386. In response to these criticisms, Telstra updated data in the underlying databases in the PIE II model and submitted that the ACCC could not rely on PIE II without making such adjustments.²³⁹ Telstra's amendments involved overwriting various underlying databases in the model with updated information from 2006 and 2007—customer locations, SIO distribution per ESA, banding of exchanges, starting asset prices and forecasts of SIOs, MOUs and call volumes—as well as amending input variables in the model such as the US\$ exchange rate, ULLS target demand proportions, price

²³⁵ Optus, above n 53, pp. 15-16.

²³⁶ PowerTel and Request, above n 53, p. 11.

²³⁷ Telstra, above n 46, p. 29.

²³⁸ Telstra, *op cit*, pp. 29-30.

²³⁹ Telstra, *op cit*, p. 30; Annexure 21.

trends and WACC.²⁴⁰

387. PowerTel/Request in their reply submissions noted Telstra's adjustments but maintained that the PIE II model was "fundamentally defective and unreliable".²⁴¹ It is unclear whether PowerTel/Request were objecting to the approach used by Telstra or to particular parameters.

ACCC's view

388. The ACCC deals with certain of Telstra's contentions and suggested changes separately below. However it considers it appropriate to firstly consider Telstra's updated version of the PIE II model to the procedure proposed by the ACCC in the DFDs.
389. The ACCC notes that its DFD approach suffers from some inherent limitations, such as being based on customer locations from 2001 and relying on an extrapolation of prices from 2002-03, 2003-04 and 2004-05, rather than modelling the years of the undertaking. In that respect, the ACCC considers that its DFD approach was the best approach available at that time.
390. However, in light of Telstra updating PIE II to contain information more applicable to the periods relevant to the arbitrations, the ACCC considers that it is preferable to use Telstra's proposed model (subject to the views contained below on the appropriate inputs). The ACCC considers that the use of customer, SIO and usage data more proximate to the time of the arbitrations will better lead to estimation of the forward-looking cost of the network for the periods of the final determinations.
391. The ACCC notes that access seekers in their initial submissions generally supported the ACCC's proposed approach in its consultation paper. However at that stage parties did not have access to the updated PIE II provided by Telstra. Access seekers have generally not objected to the approach of using the updated model.
392. Accordingly the ACCC considers that it will use the updated PIE II model submitted by Telstra, but populated with the ACCC's preferred inputs as discussed below, in preference to the use of a roll-forward mechanism in its calculations of ULLS network costs. The ACCC notes that it generally considers it appropriate to use information available at around the time of the commencement of the dispute, but in the present case considers that the revised PIE II model's advantages over the roll-forward approach mean that it should use the revised model.

Weighted average cost of capital inputs

393. The weighted average cost of capital (WACC) is used to calculate a normal return on capital employed. There are a number of inputs relevant to deriving a WACC. The ACCC in its consultation paper proposed using a 'post-tax vanilla' WACC ranging

²⁴⁰ Ibid.

²⁴¹ PowerTel and Request, above n 53, p. 39.

from around 8.5 per cent to 9.5 per cent for each relevant year. These rates and inputs were based on analysis and evidence discussed in the ACCC's assessment of WACC as part of its consideration of Telstra's ULLS monthly charges access undertaking.²⁴² The ACCC sought the parties' views in its consultation paper.

394. The matters that the ACCC particularly drew the parties' attention to were:

- whether the asset beta, and WACC inputs generally, should be the asset beta and inputs observed for a business supplying PSTN services, or some other business – the ACCC's preliminary view was that it should be the former²⁴³
- whether the risk free rate should be based upon a five year or ten year bond – the ACCC's preliminary view was to follow its current practice of using the yield on Commonwealth 10 year bonds and to take a 10 day average leading up to the relevant date
- the date upon which the relevant observations of the risk free rate should be made for the financial years subsequent to the time to which the final determination is to be backdated – the ACCC's preliminary view was that it is appropriate to use forward looking risk-free rate data from around the time that the dispute began, consistent with the approach outlined in the ACCC's letter of 5 April 2007²⁴⁴
- whether there was an asymmetry in social consequences from setting the WACC too low that should be accounted for by setting a WACC uplifted by one standard deviation – the ACCC's preliminary view was that it was not clear that there is any asymmetry in outcomes and that no uplift should be incorporated into the WACC.²⁴⁵

395. The ACCC's preliminary views on the first and fourth of these points were informed by the conclusions of the Tribunal in its consideration of the WACC in Telstra's ULLS monthly charge undertakings.²⁴⁶

396. The ACCC used certain WACC inputs that reflected conclusions drawn in its August 2006 final decision on Telstra's ULLS undertaking about debt premium and debt issuance costs. It proposed using the statutory tax rate as a pragmatic solution.

Submissions from parties

²⁴² ACCC, above n 35, Appendix D.

²⁴³ ACCC, above n 35, p. 101.

²⁴⁴ The ACCC used for the years 2006-07 and 2007-08 a rate of 5.82 per cent, which is an average for the 10 days leading up until 30 June 2006. The ACCC considers that, as a forward-looking estimate from 2005-06 (the year of negotiations and notification of disputes), it would be appropriate to use this rate for 2006-07 and 2007-08.

²⁴⁵ ACCC, above n 35, p. 127.

²⁴⁶ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [428] to [429], [449].

397. Telstra submits that the estimation of the WACC should be based on the approach as described in its submission, and in particular on the reports of Professor Bowman attached to its submission.²⁴⁷
398. Telstra submits that the ACCC is applying a WACC developed in the context of PSTN OTA. Telstra submits that the ULLS has greater riskiness to PSTN OTA as services supplied over it, such as broadband, have a more discretionary element than traditional telephone services and that accordingly a higher WACC would be appropriate.²⁴⁸ Telstra also submits on various values and parameters to be used in quantifying the WACC:²⁴⁹
- the ACCC should apply a 10 year bond rate, but the risk free rate should not be averaged, should be observed on the previous trading day to each of 1 July 2005, 1 July 2006 and 1 July 2007 and should be applied to asset valuations on or close to those dates
 - a Telstra-wide debt risk premium DRP should be preferred rather than a benchmark DRP, and as with the risk free rate should be measured on the trading days prior to 1 July 2005, 1 July 2006 and 1 July 2007 and that these values be applied to the asset valuations on or close to those dates
 - debt issuance costs of around 15 basis points should be allowed based on results from US studies
 - the market risk premium (“MRP”) should be 7.0 per cent and not 6 per cent as adopted by the ACCC in the past
 - a corporate tax rate is to be preferred
 - an imputation factor of 0 per cent should be used to reflect emerging international opinion about the marginal investor
 - an asset beta of 0.75 is more appropriate to pricing ULLS services in recognition of higher systematic risk
 - equity issuance costs should be included in the WACC rather than cash flows
 - gearing should be [c-i-c] per cent or [c-i-c] per cent rather than the ACCC’s preferred 40 per cent.
399. Telstra also raises, as it has in other regulatory proceedings, what might be termed the ‘welfare asymmetry’ argument; that the social consequences of under-estimating the

²⁴⁷ Telstra, above n 46, p. 116, Annexure 18.

²⁴⁸ Telstra, *op cit*, p. 44, Annexure 18.

²⁴⁹ Ibid.

WACC are greater than the consequences of over-estimating it.²⁵⁰ Telstra submits that to address this welfare asymmetry that the WACC should be set at ‘a somewhat above normal rate-of-return’.

400. Optus submits that the ACCC’s asset beta should be adjusted to reflect the fact that operation of a CAN is lower than that of an operator of a PSTN.²⁵¹ It also submits that the risk-free rate should be averaged but that the ACCC should reconsider its use of a 10 year rate in favour of a five year rate that better accorded to the regulatory period. It submitted that using a risk-free rate from around the period of the dispute was reasonable. It submitted that there was no evidence of an asymmetry in social consequences and that an effective tax rate should be applied.
401. In its response submission, Telstra responded to Optus’ submissions.²⁵² Telstra submitted that the asset betas for gas and electricity are irrelevant and provide minimal assistance except as an inappropriate floor on a possible asset beta. It also submitted that a ten year maturity was appropriate, in that there was no notable regulatory cycle and that other conditions for matching the risk-free investment maturity to regulatory cycle were not in any case met. Telstra also submitted again that the risk-free rate should not be averaged, or calculated at around the time of the access dispute. Finally, Telstra contends that the effective tax rate is not appropriate.
402. PowerTel and Request accepted the manner in which the ACCC had calculated the WACC.²⁵³

ACCC’s views

403. Three principal issues were addressed by the parties regarding the estimation of the WACC:
- the appropriateness of applying the WACC of the PSTN to CAN services such as the ULLS (which principally affects the estimation of the Asset Beta)
 - whether to provide for an ‘above normal’ WACC value on the basis of Telstra’s ‘welfare asymmetry argument’
 - when to observe particular CAPM inputs.
404. The subsequent approach to individual CAPM inputs has a lesser influence to the WACC measure.
405. In assessing the various approaches to these issues, the ACCC has had regard to the

²⁵⁰ Telstra, *op cit*, Annexure 19.

²⁵¹ Optus, above n 53, p. 13.

²⁵² Telstra, above n 15, pp. 8-19.

²⁵³ PowerTel and Request, above n 53, p. 29.

ULLS pricing principles and the subsection 152CR(1) criteria.

– **Appropriate asset beta**

406. The ACCC maintains its position that the appropriate WACC for the ULLS is one based on a business of providing access to a fixed-line customer access network, either to itself or to other service providers.
407. Consistent with previous decisions, the ACCC notes that direct observations are unavailable for different services supplied on the CAN, such as the ULLS. In part, this is a result of factors such as vertical integration and expansion of fixed network service providers into additional services such as mobile telephony. Consequently, the ACCC's approach has been to use the observed asset beta of a business of supplying voice services on a fixed-line CAN, before the relevant business diversified into other services, such as mobiles.²⁵⁴
408. Similarly, the ACCC rejects the submission that the asset beta, and other CAPM inputs, should be adjusted in an attempt to more precisely estimate the WACC for a business of only providing the ULLS. Consistent with previous decisions, the ACCC considers that the relevant consideration is the WACC (and hence asset beta) for a carrier who operates the PSTN. Such an operator will make the decision whether to operate the PSTN on the aggregate cash flows generated by the PSTN asset, whether or not the cash flows are generated from the supply of the ULLS, broadband, traditional voice or other services.²⁵⁵ The ACCC does not consider that it is necessary or realistic to consider an operator of just ULLS services.
409. Furthermore, and at the conceptual level, the ACCC reaffirms its position that if a higher asset beta was to be allocated to a specific set of assets, then, in principle, this would require a compensating reduction in the WACC that is applied to other fixed-line services. Telstra discusses the desirability of applying different asset betas to different assets. However, based on the material provided and assessed, the ACCC does not consider that compensating adjustments to other assets necessary to ensure that the WACC for the CAN as a whole remains constant, or how these could be reliably estimated.
410. Finally, the ACCC again raises the important practical consideration that in considering adjustments of this type to reflect the relative riskiness of different services the potential exists to introduce many sources of error. As such any change would need to be supported by robust and extensive data. The ACCC does not consider that such data are available, and the submissions made to the ACCC do not attempt to make such a measure of the relative riskiness of different services. In that respect, the ACCC notes the views of the Tribunal that, while "it is arguable that different WACC values can be validly determined for each asset group. However the leap from theoretical possibility to practical reality can be a large one".²⁵⁶

²⁵⁴ ACCC, above n 35, p. 110-115.

²⁵⁵ ACCC, *op cit*, p. 101.

²⁵⁶ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [428] to [429].

411. Following from these considerations, and consistent with its previous views, the ACCC has applied the same WACCs to both network and specific costs.

– **Welfare asymmetry**

412. The ACCC has considered Telstra’s arguments previously, and has not accepted that there is a welfare asymmetry in the social consequences of over-estimating or under-estimating the WACC.²⁵⁷ The Tribunal has also considered a possible asymmetry and relevantly considered that:²⁵⁸

We accept that it is possible that there may be asymmetric consequences associated with setting a WACC too high or too low. However, it is not clear to us that the asymmetry would always imply that overestimation of the WACC led to a lesser social cost than underestimation of the WACC. The nature of the asymmetric consequences of incorrectly setting a WACC is likely to depend on the circumstances of a given matter.

413. The ACCC remains of the view that an unbiased estimate of the WACC that allows for a normal rate of return on capital is appropriate given the regulatory criteria to which it must have regard.
414. Telstra presents a description of the potential cause and effects of any welfare asymmetry.²⁵⁹ Telstra contends that the consumer gains from consumption of a service are substantial and that if the WACC is set too low these gains will not be realised insofar as the necessary investment is not undertaken. Conversely, Telstra states that if the WACC is set above the normal level, the investment will always be undertaken and that the consumption gains will be realised. However, Telstra acknowledges that there will be a ‘second-order’ welfare effect from overpricing of these services. Essentially, Telstra contends that the ‘second-order’ effects from overpricing will be less adverse to welfare than the consumption effects of the investment not occurring in the first instance.
415. An important assumption underlying Telstra’s submission is that investment decisions are effectively ‘all-or-nothing’: either the WACC is sufficient and all investors would consider undertaking the investment, or the WACC is collectively adjudged to be too low and no investor will consider undertaking the investment. Telstra states that this decision will be common to all investors as typically they will require external financing for major projects and, it can be inferred, that capital markets tend to hold a collective view of the expected viability of different investments.
416. The conceptual argument presented by Telstra obviously does not allow for heterogeneity in terms of risk profiles, or requirements as to returns among investors or participants in capital markets. Telstra’s assumption is that all investors – and by extension financiers in capital markets – share a common view as to an appropriate

²⁵⁷ ACCC, above n 35, p. 125.

²⁵⁸ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [449].

²⁵⁹ Telstra, above n 46, Annexure 19.

WACC for an investment project. This implies that *all* investors have similar expected marginal costs and revenues (as this impacts the margin necessary for the project to be considered viable). In addition, it assumes that all potential investors have a homogenous risk profile.

417. In the ACCC's view these assumptions are unlikely to reflect how investment decisions are actually made in practice. More generally, in the ACCC's view, the decision as to whether or not to invest in a specific project can differ among different groups of investors, and over time is dependant on factors such as the relative risk aversion and the expected returns required on different investments. In this respect, the ACCC notes the views of the Tribunal:²⁶⁰

Telstra assumed that setting a WACC that was too low would deter investors. However, different investors will inevitably have different attitudes to risk. Setting the WACC below the true value may deter some investors and therefore result in less investment taking place in the short run, but it will not be likely to cause all investors to cease providing funds.

418. As risk aversion and expected returns are likely to differ among different investors and institutions, it is unlikely that there will always be a common view among investors and capital markets as to appropriateness of a particular return on capital. Rather investors will have different risk and return profiles for investment projects, and it is precisely the possibility to take advantage of these differences which arguably drive capital markets. For this reason, it is possible to observe in practice a combination of both high risk investments being undertaken at high rates of return, and at the same time, relatively low risk investments with correspondingly lower rates of return.
419. A separate argument raised in Telstra's submission to these proceedings is that the WACC employed by the ACCC may, in fact, be part of a 'strategy by the regulator of leaning toward low rates of return' or that the ACCC might offer a rate of return designed to ignore certain costs.²⁶¹ Telstra submits that, as a consequence, the WACC should be increased to address this. This suggestion raises different issues to those discussed in prior regulatory decisions, where Telstra's position could be inferred to be one of accepting that the WACC estimate was properly estimated, but that the uncertainty regarding the estimation process suggested that it was prudent to allow for an above normal return.
420. The ACCC has not been provided with, nor is it aware of, any evidence that it has followed a strategy of leaning towards low rates of return in the estimation of the WACC or ignored relevant costs in setting the WACC. In the ACCC's view, suggestions that the ACCC has acted in this way, and the WACC should be adjusted to address this, are unfounded.

– Other CAPM inputs

²⁶⁰ Telstra, *op cit*, Annexure 19.

²⁶¹ Ibid.

421. The ACCC's views on the other CAPM inputs are as follows:

Risk-free rate: For this decision, the ACCC considers that the risk-free rate should be the 10 year government bond rate, averaged in the period leading up to the relevant observation date rather than a point estimate. The ACCC has not chosen a shorter maturity bond. Averaging is done to lessen volatility.

The observations should be taken on an ex ante basis for financial years commencing after the date from which these determinations will have effect. In this case, the average value for the period leading up to 30 June 2006 has been applied to 2006-07, and the following year, reflecting the ACCC's decision as to when the ULLS monthly charge terms should apply. The ACCC considers that this approach better replicates what would have occurred in an effectively competitive market for the ULLS, where prices would be set proximate to when access was sought, having regard to unbiased forecasts for future periods. The ACCC outlined this approach in a letter to the parties dated 5 April 2007. The risk free rates are sourced from the Reserve Bank of Australia.²⁶²

MRP: The ACCC has noted previously that there is a large amount of conflicting evidence about the MRP.²⁶³ The ACCC estimates a forward-looking market risk premium by adjusting historically observed values. Adjustments are made to reflect that markets are becoming more integrated and efficient. The ACCC chose a value of six per cent, which is at the lower end of the range of historically observed values. This value is generally consistent with past and current regulatory practice and market participant survey results.²⁶⁴

Debt ratio: The ACCC has used a target debt ratio of 40 per cent. It considers that this is reflective of the target debt ratio for a company that provides services over the PSTN and CAN to itself and others. The 40 per cent rate is in accordance with the Telstra-wide historic book value and overseas fixed line regulation.²⁶⁵

Asset beta: The asset beta used is 0.5, which is leveraged to provide an equity beta of around 0.83. The basis for these values is discussed above. The ACCC does not consider that it is necessary to consider the betas for electricity and gas companies.

Debt premium: Reflecting its previous ULLS decisions,²⁶⁶ the ACCC has used a debt premium of 1.02 per cent, reflecting a benchmark debt premium for a company that provides services over the PSTN and CAN to itself and others.

²⁶² RBA, *Interest rates and yields: Money market and Commonwealth government securities*, viewed 7 December 2007, <
http://www.rba.gov.au/Statistics/HistoricalInterestRatesYields/1993_to_2007.xls>.

²⁶³ ACCC, above n 35, p.115-118.

²⁶⁴ *ibid*, p. 117-8.

²⁶⁵ *ibid*, p. 103.

²⁶⁶ ACCC, *op cit*, p.106-7.

Issuance cost: Reflecting its previous ULLS decisions,²⁶⁷ the ACCC has used a value of 0.083 per cent for debt issuance, reflecting the benchmark debt issuance costs appropriate for a company that provides services over the PSTN and CAN to itself and others and finances an amount the value of Telstra's CAN. Equity issuance costs are not included in the WACC. Should such costs be relevant, they can be considered for inclusion within the efficient cost pool as an operating-type expense.

Gamma: The possible values range from 0 to 1. The ACCC notes Telstra's views but has adopted a value of 0.5, the midpoint of the range. The final WACC value is not materially sensitive to the value chosen.

Tax rate: Reflecting its previous ULLS decisions,²⁶⁸ the ACCC prefers an effective tax rate. However it notes that a reliable estimate of the effective tax rate may not be possible. The ACCC has used a corporate tax rate in its calculations below. This does not have a significant effect on cost estimates.

– Resulting WACC values

422. The following WACC values result from the ACCC's above analysis. The 2005-06, 2006-07 and 2007-08 WACCs are entered into the PIE II model. The earlier WACCs are relevant to the ACCC's consideration of specific costs, discussed below.

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
D/V ratio	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
E/V ratio	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Risk-free (rf)	0.0623	0.0587	0.0590	0.0483	0.0582	0.0515	0.0582	0.0582
Risk premium	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Asset beta	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Equity beta	0.8299	0.8301	0.8301	0.8305	0.8301	0.8304	0.8301	0.8301
Tax rate (e)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Debt premium	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102

²⁶⁷ ACCC, *op cit*, p.107-10.

²⁶⁸ ACCC, *op cit*, p.120.

Issuance cost	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Gamma	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Return on equity	0.1121	0.1085	0.1088	0.0982	0.1080	0.1013	0.1080	0.1080
Return on debt	0.0733	0.0697	0.0701	0.0594	0.0692	0.0625	0.0692	0.0692

WACC (post-tax vanilla)	9.66%	9.30%	9.33%	8.26%	9.25%	8.58%	9.25%	9.25%
WACC (pre-tax exclusive of imputation benefit)	10.85%	10.45%	10.48%	9.30%	10.39%	9.65%	10.39%	10.39%

Price trends and tilted annuities

423. The PIE II model allows a user to enter a number of price trends that reflect changes in the prices for inputs into the network. The price trends serve two purposes. Firstly, they are used to update asset prices from year to year (e.g. to reflect increase or decrease in asset prices from 2005-06 to 2006-07 to 2007-08). Secondly, the price trends are used in calculating the tilted annuity that is used to annualise capital costs in the model.
424. These two uses have different effects on the ultimate price to be derived from the model. When an asset price is increasing over time, the asset price in the model will be higher year on year. However the tilted annuity will mean that some cost recovery is deferred until later years. Similarly, when an asset price is decreasing over time, the asset price in the model will be lower year on year. However the tilted annuity will mean that cost recovery is brought forward to earlier years.
425. The ACCC's preliminary position set out in its consultation paper was to update previously estimated Telstra price trends related to main cable, main conduit and trenching, distribution cable and distribution conduit and trenching, and to accept Telstra's previous estimates of 0 per cent price trends for network lands and buildings and indirects. Telstra has previously given evidence that the cable and conduit assets represent around [c-i-c] per cent of the value of the total network assets used in supplying the ULLS. Accordingly, the ACCC considered that the price trend in other variables could be expected to have little effect on ULLS costs and that it was not evident on what basis those trends could be changed. Accordingly it did not propose to update

these other price trends.

Submissions from parties

426. Telstra submitted that updating only the asset prices for cable and conduits was inappropriate.²⁶⁹ It referred to the views of the Tribunal about selectively updating only certain asset price trends.²⁷⁰ Telstra provided updated price trends for all of its assets in Telstra's "Depreciation, O&M, indirect and price trend values for asset classes" worksheet in PIE II that affect the ULLS access prices. The calculation of those price trends was set out in a statement of Telstra employee Geoff Sims, derived using publicly available information such as Australian Bureau of Statistics (ABS) data.
427. Telstra uses the calculated Sims price trends for two purposes. Firstly, it updates the asset prices in its element cost tables to 2004-05 values in order to generate a base version of its updated PIE II model. Secondly, it also uses 13 of the 21 calculated price trends in the PIE II "Scenario costing" sheet in order to advance asset values to the appropriate year.²⁷¹ It does not enter those price trends into the price trend category for asset classes for the 28 assets in its "Depreciation, O&M, indirect and price trend values for asset classes" sheet. This is because of its submissions on tilted annuities (which is discussed below). Accordingly, eight asset price trends are not used in the model to update costs year on year. However, Telstra submits that the asset classes for which it updates prices account for assets which represent [c-i-c] per cent of CAN costs.²⁷²
428. Optus submits that it is appropriate to have regard to the price trend in assets in the way proposed by the ACCC.²⁷³ However, Optus also submits that the large increase in copper prices over recent periods might mean that alternative technologies would be more viable compared to copper.²⁷⁴ Optus submits that this could be seen as a defect in the model, but noted that it would be difficult to adjust for this.
429. Telstra submits that a tilted annuity should not be used in the model.²⁷⁵ Rather it submitted that using the tilted annuity suffers from the 'year 1 problem'. Telstra describes the problem as follows:²⁷⁶

Whenever capital charges vary over time, as is the case with a tilted annuity (whenever the tilt value is non-zero), the TSLRIC methodology which assumes that a new optimised network is installed each year, will result in the

²⁶⁹ Telstra, above n 46, p. 112, Annexure 17.

²⁷⁰ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [347] to [348], [366].

²⁷¹ The USO asset category is given a 0 per cent price trend.

²⁷² Telstra, above n 46, p. 112, Annexure 17.

²⁷³ Optus, above n 53, p. 15.

²⁷⁴ Optus, *op cit*, p. 12.

²⁷⁵ Telstra, above n 46, p. 163, Annexure 20.

²⁷⁶ Telstra, *op cit*, p. 163.

infrastructure owner receiving revenue to compensate for year 1 capital charges. Where capital charges are front-loaded, this will result in the owner of the assets being over-compensated for the cost of the assets, as it will receive revenues consistent with the year 1 capital charge every year. Conversely, if the capital charges are back-loaded, this will result in under-compensation.

In Telstra's PIE II model, the tilt applied for the majority of CAN assets is positive. That is, the replacement cost of CAN assets is generally increasing over time so that the tilted annuity results in a back-loaded profile of capital charges. However, the only capital charge that is ever used from PIE II is the year 1 capital charge, the lowest value over the entire life of the assets.

430. Telstra accordingly submits that it only ever recovers the lower year 1 capital charge and that it under-recovers over time. It considers that it would be appropriate to set the tilt factor for assets to zero in the annuity.²⁷⁷ Telstra submits that this would allow it to recover an even amount of depreciation in each year and that this would be a more appropriate cost recovery profile. Telstra submits that the ACCC “should take a more balanced approach and also adjust for errors that move costs [downwards].”²⁷⁸
431. As noted above Telstra considers that asset values should continue to be scaled up year on year.
432. Optus, in its reply submission, submits that it would be inappropriate to accept Telstra's submission.²⁷⁹ Optus submits that a tilted annuity is common in access pricing models that revalue the asset base at shorter than the life of the assets, based on an optimised replacement cost of the asset base. Optus submits that this is in order to allow “regulators to replicate the cost recovery conditions that would be faced by a firm in a competitive market”.²⁸⁰ Optus submits that the rationale for the tilt is:²⁸¹

(a) when input prices are falling, the incumbent operators will know that a new entrant in the future will have a lower cost base. As a result, incumbent operators will only invest in the market today if they can recover more of their capital in the early periods, because they know they will face a lower cost entrant in the future; or alternatively

(b) when input prices are rising, the incumbent operators will know that a new entrant in the future will have a high cost base, therefore their future return will be ‘protected’, they are[sic] can therefore afford to invest and compete price down today in the knowledge they will not face a new entrant with a lower cost base in the future.

²⁷⁷ Telstra, *op cit*, p. 164, Annexure 20.

²⁷⁸ Ibid.

²⁷⁹ Optus, above n 198, p. 15.

²⁸⁰ Optus, *op cit*, pp. 15-16.

²⁸¹ Optus, *op cit*, p. 16.

433. Optus submits that the annuity formula accounts for future price movements by revaluing the asset base each time the tilted annuity is applied (ie. when the next year is priced), and that accordingly the year 1 problem does not exist. It submits that Telstra will recover 'year 2' in the next period of the arbitration.
434. Telstra, in its third submission, agrees with Optus that a tilted annuity will recover the initial price of the asset and no more.²⁸² However, it contends that the ACCC's approach to ULLS prices has not been consistent and that a tilted annuity would compound problems with cost recovery. It submits that, as the ACCC has reduced its estimates of network costs since 2002, the cost profile over time has actually been declining, in contradiction to the expected profile under a tilted annuity. It also submits that, in any case, a tilted annuity should not be applied when asset prices are increasing and depreciation is accordingly backloaded.²⁸³

ACCC's views

435. The ACCC firstly considers that, in general, Telstra's estimated price trends are appropriate. As the trends are based on publicly available ABS data, they are verifiable, and the proposed approach to the calculation of the price trends accords with the ACCC's approach in the DFDs. No party opposed the calculated price trends. Those price trends are:

Asset category	Description	Price trend (5 year CAGR)
BD	Radio transmission	0.98%
BDS	Radio spectrum	0.98%
BO	Optical fibre	-7.01%
Ind	Indirect assets (Fleet, IT)	-1.52%
LI	Lead-ins	4.13%
NM	Network management	-18.28%
Prp	Land & Buildings	1.49%
SD	SDH transmission	-7.01%
SDS	SDH software	-5.14%
SL	Local switching	-7.01%
SLS	LAS software	-5.14%
SP	Signalling transfer point	-7.01%
ST	Transit switching	-7.01%
STS	TNS software	-5.14%
XC	Main conduit	5.02%
XD	Distribution cable	4.13%
XN	Distribution conduit	5.11%
XP	Pair gain systems	-3.14%
XR	Customer radio	-3.65%
XU	Main cable	4.46%
ZT	Miscellaneous transmission	0.98%

²⁸² Telstra, above n 49, p. 13.

²⁸³ Telstra, *Telstra's confidential response to the Commission's draft decision on Telstra's ULLS monthly charge undertakings dated 23 December 2005*, 7 August 2006, p. 14.

436. In regard to Telstra's submissions on whether a tilted annuity should be used, the ACCC considers that the 'year 1' problem does not exist, given the approach to pricing that is taken by the ACCC. This is because, in addition to the tilted annuity being applied, the asset prices for later years are increased by the estimated change in prices. Accordingly, while Telstra is only paid for the first year of a tilted annuity, in each subsequent period the actual value of the payment increases in line with the estimated price trends. This results in a cost recovery profile that mirrors the profile under a tilted annuity over time.
437. Conversely, Telstra has submitted that it should be permitted to recover its assets by use of a flat annuity, while increasing asset costs each year. This approach would result in an over-recovery by Telstra of the value of its network assets. A flat annuity would not lead to over-recovery if Telstra received the same amount each year. However Telstra also submits that asset prices should be increased each year. This would result in a significant overpayment from access seekers. For example, over the life of an asset of 10 years and a WACC of 10 per cent, with capital costs increasing by 4 per cent a year, Telstra's proposed approach would lead to an over-recovery in the order of 16.44 per cent in each year of the asset's life.
438. Accordingly, the ACCC considers that taking the approach submitted by Telstra would lead to ULLS network costs higher than a cost-reflective level. Having regard to the ACCC's ULLS pricing principles, the ACCC considers that Telstra's approach would not reflect TSLRIC+, but would rather overstate it.
439. The ACCC also notes that Telstra submits that a flat annuity is appropriate due to what it characterises as inconsistencies in the ACCC's pricing approach to ULLS in that ULLS prices have not consistently increased over time. The ACCC rejects this contention. Firstly, the ACCC notes that prices set in the final determinations will be set for a known and consistent period of time. Secondly, the ACCC's pricing approach to ULLS network costs over time has been consistent and has evolved with improved modelling techniques. In that respect, the ACCC notes its previous conclusions, expressed earlier in these reasons, about the applicability and appropriateness of the n/e/r/a model used for price setting. Accordingly, the ACCC considers that the evidence presented by Telstra would equally suggest that the network cost profile provided by Telstra demonstrates significant over-recovery by Telstra in early periods.
440. The ACCC also does not consider that it would be appropriate to only apply a tilted annuity when costs are declining overall. The ACCC considers that there are valid economic reasons for applying the tilted annuity consistently regardless of the direction of the tilt. It notes Optus' submission in that regard. In particular, a tilted annuity when prices are rising reflects the fact that costs can be recovered in higher prices in later periods, when any entrant will face the higher level of costs, rather than the current period where costs are relatively low. This is consistent with the outcome likely to occur in a competitive market. The ACCC considers that applying the tilt only when it resulted in a price increase would be inconsistent.

441. Having regard to the subsection 152CR(1) matters, the first criterion concerns the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).

The ACCC considers that access charges that reflect forward-looking efficient costs will better promote competition, as they will allow the access provider and access seeker to compete in downstream markets on their relative merits. The ACCC considers that adopting Telstra's submitted approach would inflate costs for access seekers and inhibit competition on the merits. The ACCC considers that its proposed approach is more consistent with outcomes in a competitive market.

442. The ACCC does not consider that the approach adopted on this issue affects the objective of achieving any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) affected by this decision.
443. Turning to the objective of encouraging economic efficiency in use or investment (paragraph 152AB(2)(e)), the ACCC considers that its approach will better encourage efficiencies. The ACCC considers that its approach will better lead to investment and efficient use of infrastructure related to the provision of downstream DSL and voice services. This is because a cost-reflective price, more consistent with the outcomes in a competitive market for the ULLS, will encourage competition in downstream services and encourage efficiencies in markets for these services. The ACCC considers that the pricing approach will also lead to more efficient build/buy decisions as the ULLS prices will reflect the efficient cost of the CAN.
444. The next criterion is the legitimate business interests of the provider and its investment in the CAN which is used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b). The ACCC considers that its tilted annuity approach will lead to Telstra recovering an amount commensurate with its legitimate commercial or business interests, including its recovery of direct costs. This is because the increased asset base in each subsequent period will lead to a cost profile that reflects the cost to Telstra of its network assets. Telstra can continue to generate economies of scale and scope over its CAN. Conversely, Telstra's submitted approach would lead to it recovering more than necessary to meet its legitimate business interests.
445. The next criterion is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The ACCC similarly considers that the tilted annuity approach will best meet the interests of access seekers in being able to compete on their merits. The ACCC considers that Telstra's proposed approach would lead to an inflated ULLS network cost, giving Telstra a significant cost advantage, and preventing access seekers from competing with Telstra on their merits.
446. The next criterion is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, either to itself or to ULLS access seekers. In this context, the

criterion involves consideration of whether Telstra will be able to recover its network costs inclusive of a normal risk-adjusted return on its capital employed. As noted above in the ACCC's consideration of paragraph 152CR(1)(b), the ACCC considers that the use of a tilted annuity will allow Telstra to recover its network costs.

447. The ACCC does not consider that the matters in paragraph 152CR(1)(e) and (f) materially contribute to consideration of the price path approach. In relation to paragraph 152CR(1)(g), the ACCC has considered efficiency incentives in its consideration of the LTIE above.
448. Therefore the ACCC will use Telstra's calculated price trends and will continue to apply a tilted annuity as it considers it is appropriate in accordance with both the pricing principles and the subsection 152CR(1) matters.

4.1.9 Particular model inputs

449. Parties have made submissions in relation to various particular inputs used in the PIE II model. These same inputs are used in the updated version of PIE II provided by Telstra as are used in the previous version of the model.

Trench sharing

450. The ACCC noted in its consultation paper that trench sharing reduces the cost of trenches in the provision of fixed line network services. Telstra has traditionally stated that the appropriate level of trench sharing in the PIE II model would be 1 per cent, reflecting the proportion of open trenches available over one year.²⁸⁴ Comparatively, the ACCC has stated that a value in the order of 13 per cent, reflecting historical cumulative trench sharing, would be more appropriate.²⁸⁵ The ACCC noted that the 13 per cent figure might now itself understate historical trench sharing.
451. The use of a higher trench sharing value will tend to decrease estimates of network costs. In setting prices for the DFDs, the ACCC's preliminary approach was to use a 13 per cent trench sharing figure, reflecting the ACCC's past views.

Submissions from parties

452. Telstra submits that a 1 per cent trench sharing figure is still appropriate.²⁸⁶ Telstra submits that an efficient network operator deploying a network today would only be able to use free trenches to the extent there are new SIOs in new estates in one year. It also submits that the PIE II model inherently underestimates the cost of trenches due to the manner in which it accounts for new estates. Telstra presents a number of

²⁸⁴ Telstra, *op cit*, Annexure A.

²⁸⁵ ACCC, above n 35, pp. 55-6.

²⁸⁶ Telstra, above n 46, p. 109, Annexure 16.

reasons which it submits support a lower trench sharing figure, including:²⁸⁷

- new estates being laid with fibre
- the PIE II model being forward-looking and historical trench sharing being irrelevant
- the need to recover holding capital
- Telstra having limited ability to share trenches with other utilities.

453. Optus submits that the Tribunal's ULLS decision supports the inclusion of historical cumulative trench sharing.²⁸⁸ It submits that, in the long run, a new entrant would have available to it all inputs of production, including the availability of open trenches in new estates. However, Optus submits that the ACCC has in fact understated the level of trench sharing as it has used a static figure. Optus submits that the amount of trench sharing used in the model should increase from year to year to represent new estates. Optus' reply submission submits that the use of a historical trench sharing measure is supported by analyst reports.²⁸⁹ Optus also submits that the PIE II model is not entirely forward-looking given that it is a scorched node model and that a proper application of a scorched node model would reflect historical trench sharing.
454. In its response submission, Telstra contends that Optus's submissions are inconsistent and should be rejected.²⁹⁰
455. PowerTel and Request cite a report by MJAE that had been provided in the course of the ACCC's 2006 undertaking assessment.²⁹¹ The MJAE report considers that trench sharing in new estates should reflect a cumulative, historical trench sharing measure.
456. Chime submits that the ACCC should make an allowance for the fact that a 13 per cent trench sharing figure may understate historical trench sharing.²⁹² Primus makes an equivalent submission.²⁹³

ACCC's view

457. Telstra's contentions in support of its 1 per cent figure are based on the argument that the PIE II model and the TSLRIC concept assumes that the network which is to be

²⁸⁷ Telstra, *op cit*, p. 110, Annexure 16.

²⁸⁸ Optus, above n 53, p. 10.

²⁸⁹ Optus, above n 198, p. 19.

²⁹⁰ Telstra, above n 44, p. 6.

²⁹¹ PowerTel and Request, above n 53, p. 18.

²⁹² Chime, above n 204, p. 2.

²⁹³ Primus, above n 206, p. 2.

costed is rebuilt in each year priced. Accordingly, Telstra submits that given that only 1 per cent of trenches are available in new estates each year, it is inappropriate to have regard to Telstra's historical trench sharing figures.

458. The ACCC notes Telstra's submissions that, under a forward-looking network, historical sharing should be ignored. The ACCC considers that the concept of a forward-looking network needs to be related to realities of deployment of the network. The ACCC considers that, in the real world, construction of a network would be planned a significant time in advance with other operators and utilities, and would allow a new entrant to progressively make use of open trenches in new estates at no cost. Accordingly, the best available proxy for trench sharing in new estates is the cumulative (or historical) trench sharing measure.
459. The ACCC notes that Telstra considers that its ability to share trenches with other utilities might be limited. However the ACCC considers that, given that the 13 per cent figure relates only to sharing in new estates, this is likely to be of limited concern. Infrastructure deployment in new estates is planned simultaneously and can take account of matters such as separation requirements. The 13 per cent figure does not account for further trench sharing with other infrastructure owners outside new estates, nor for increasing the level of sharing between the IEN and CAN.
460. In relation to submissions about holding capital, the ACCC considers that matters of depreciation and holding capital are adequately dealt with in the general depreciation and WACC calculations already accounted for in the PIE II model.
461. The ACCC acknowledges the submissions of access seeker parties that 13 per cent may understate historical trench sharing. However, it considers that the 13 per cent figure has been the subject of significant previous analysis by the ACCC²⁹⁴ and industry and would be the appropriate figure to use in this case. The ACCC notes that additional small changes to trench sharing have marginal changes on the network cost estimates produced by the PIE II model.
462. Having regard to the subsection 152CR(1) matters, the first criterion concerns the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).
463. The ACCC considers that using a 13 per cent trench sharing figure rather than a 1 per cent trench sharing figure will better reflect the amount of trench sharing available to an infrastructure owner deploying the CAN. Accordingly, this will better reflect the efficient forward-looking cost of Telstra's ULLS and better promote competition. A 13% trench sharing figure will allow the access provider and access seeker to compete in downstream markets on their relative merits. The ACCC considers that adopting Telstra's submitted approach would inflate costs for access seekers and

²⁹⁴ ACCC, above n 35

inhibit competition on the merits.

464. The ACCC does not consider that the approach adopted on this issue affects the objective of achieving any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) affected by this decision.
465. Turning to the objective of encouraging economic efficiency in use or investment (paragraph 152AB(2)(e)), the ACCC considers that a 13% trench sharing figure will better encourage efficiencies. The ACCC considers that its approach will better lead to investment and efficient use of infrastructure related to the provision of downstream DSL and voice services. This is because a cost-reflective price, more consistent with the outcomes in a competitive market for the ULLS, will encourage competition in downstream services and encourage efficiencies in markets for these services. The ACCC considers that the pricing approach will also lead to more efficient build/buy decisions as the ULLS prices will reflect the efficient cost of the CAN.
466. The next criterion is the legitimate business interests of the provider and its investment in the CAN which is used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b). As the 13% figure reflects the amount of trench sharing available to Telstra historically and the level of sharing available to an future provider of the ULLS, and hence reductions in cost achievable, it will allow a level of cost recovery necessary to meet Telstra's legitimate business interests.
467. The next criterion is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The ACCC similarly considers that the tilted annuity approach will best meet the interests of access seekers in being able to compete on their merits. Using a 1% trench sharing figure would lead to an inflated ULLS network cost, preventing access seekers from competing with Telstra on their merits.
468. The next criterion is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, either to itself or to ULLS access seekers. In this context, the criterion involves consideration of whether Telstra will be able to recover its network costs inclusive of a normal risk-adjusted return on its capital employed. As noted above in the ACCC's consideration of paragraph 152CR(1)(b), as the 13% figure reflects the amount of trench sharing available to Telstra historically, and the level of sharing available to an future provider of the ULLS, and hence reductions in cost achievable. Accordingly the ACCC considers that the 13% trench sharing figure allows the recovery of direct costs.
469. The ACCC does not consider that the matters in paragraph 152CR(1)(e) and (f) materially contribute to consideration of the appropriate trench sharing figure. In relation to paragraph 152CR(1)(g), the ACCC has considered efficiency incentives in its consideration of the LTIE above.
470. Therefore the ACCC will use a 13% trench sharing figure as it considers it is appropriate given the TSLRIC+ pricing principles and the subsection 152CR(1)

matters.

Asset lives

471. As noted above, capital costs in the PIE II model are annualised using a tilted annuity. The key inputs into the tilted annuity formula are price trends and asset lives. The ACCC has previously expressed concerns that the asset lives used appeared to be based on accounting measures that may not represent economic asset life. The ACCC considered that this might be a particular issue for the life of copper cables in the model.²⁹⁵
472. Asset lives used in a cost model are based on economic lives of assets rather than accounting values. This reflects the useful life of the asset and the appropriate period of cost recovery for the asset. The ACCC proposed in its consultation paper to accept the asset lives entered by Telstra into its PIE II model but noted that this approach may lead to increased estimates of network costs.

Submissions from parties

473. Telstra in its initial submission submitted that the asset lives in the PIE II model were appropriate and cited reports prepared by Ernst and Young (“EY”) and PriceWaterhouseCoopers (“PWC”), as well as its own staff.²⁹⁶
474. Optus criticised the [c-i-c] year asset life for main cable in the PIE II model, contending it would lead to over-recovery by Telstra.²⁹⁷ Optus submitted that a 15 year asset life was a reasonable estimate of the economic life of the asset. Optus submitted that 15 years was consistent with results from an Ofcom study.
475. Chime submitted that the asset lives in the model appeared to be based on accounting measures rather than economic asset life.²⁹⁸
476. Primus submitted that the [c-i-c] year main cable asset life was inconsistent with the practical technical lifetime of this asset, based on advice of its consultants Gibson Quai – AAS.²⁹⁹ Primus submits that a 25 year lifetime would be more appropriate for main cable.
477. In its reply submission, Telstra maintains that the [c-i-c] year main asset life is appropriate.³⁰⁰ It also submits that copper main cable is likely to be replaced within [c-i-c] years in any case given the likelihood of a fibre-to-the-node deployment in the

²⁹⁵ ACCC, above n 35, p. 65

²⁹⁶ Telstra, above n 46, p. 106, Annexure 15.

²⁹⁷ Optus, above n 53, p. 12.

²⁹⁸ Chime, above n 53, p. 2.

²⁹⁹ Primus, above n 206, p. 3.

³⁰⁰ Telstra, above n 44, p. 6.

near future.

478. Optus' reply submission contends that 15 years was reasonable.³⁰¹ Optus submits that its analysis of Telstra's PWC and EY studies, as well as UK and Canadian examples and a MJA report,³⁰² suggest that 15 years was more appropriate. Optus submits that this was true whether or not a FTTN network could be expected to be deployed.³⁰³
479. Telstra's third submission submits that Optus' comments fail to recognise that the reports cited often refer to all cabling, and that the PIE II model deals with main and distribution cabling separately.³⁰⁴ It submits that the [c-i-c] year main asset cable life is appropriate given the [c-i-c] year distribution cable life in the model.

ACCC's views

480. The ACCC considers that the asset lives used in the PIE II model should reflect the economic lives of the assets. The asset life used directly affects the depreciation schedule of the assets and will therefore affect the network cost estimates. A too short asset life will increase network cost estimates, as cost recovery will be spread over a shorter period, and will tend to inhibit competition and lead to the recovery of more than the direct costs of the ULLS. Equivalently, a too long asset life would tend to unduly favour access seekers and adversely affect the legitimate business or commercial interests of the access provider. As noted above, the ACCC has expressed concern in the past about the appropriate asset lives for use in the PIE II model, with particular reference to main cable life.³⁰⁵
481. The evidence submitted to the ACCC is conflicting. Many reports submitted or cited by the parties did not distinguish between main cable and distribution cable in the manner of the PIE II model. Further, while the EY study indicates that distribution cable typically had a longer asset life than main cable, the PWC study indicates that the part of the network in which copper was deployed did not generally appear to make a difference to the economic life. In some cases the submissions are unclear as to whether accounting lives or economic lives are being discussed. The ACCC also notes that the information available to it does not demonstrate the basis of the "default" asset lives that Telstra has used in the model.
482. The ACCC considers that Telstra's submissions about pending FTTN deployments are not compelling. The deployment of FTTN largely represents a strategic decision rather than providing guidance about the economic lives of the assets. If Telstra's submission was to be accepted as valid, it would tend to suggest that an asset life of closer to two or three years would be appropriate. However this in turn raises issues about the appropriate technologies that should be deployed in the model and whether

³⁰¹ Optus, above n 198, p. 20.

³⁰² MJA, *Comments on discussion paper—Telstra's undertaking in relation to the Unconditioned Local Loop Services, report for the Competitive Carriers' Coalition*, 4 May 2006, page 31.

³⁰³ Optus, *op cit*, p. 24.

³⁰⁴ Telstra, above n 49, p. 12.

³⁰⁵ ACCC, above n 35, p. 65

the PIE II model can be considered forward-looking. In any case, the ACCC considers that deployment of FTTN in any significant way is unlikely during the period covered by the final determination.

483. The evidence presented by both Telstra and the access seekers suggests that a main cable life of [c-i-c] years is shorter than typically used elsewhere. EY and PWC's reports both imply a main cable life of around 15 years. Similarly, the OfCom, CRTC and MJA reports suggested a cable life of 18 years, 20 years and 20 years respectively. This evidence supports the submissions made by Optus and Primus.
484. However, while access seekers were critical of the main cable asset life, there were no submissions that the distribution cable asset life of [c-i-c] years appeared too long. This appeared equally plausible on evidence presented. In particular, the average lives of cable assets presented by PWC, OfCom, CRTC and MJA all suggested that a period of around 20 years would be a more appropriate cable life.
485. In light of the submissions from the parties, the ACCC considers that the most appropriate approach would be to increase main cable life from [c-i-c] to 12 years while decreasing the distribution cable life from [c-i-c] to 20 years. The ACCC considers that this approach better reflects the information available to it about both the average cable lives and the difference in cable lives between main and distribution cable.
486. The ACCC considers that it cannot be definitive on the appropriate asset lives to be used. However, the ACCC considers that adopting these asset lives better reflects the appropriate economic lives of the cable assets used in the PIE II model. This would be more likely to lead to efficient, forward-looking asset prices
487. Having regard to the subsection 152CR(1) matters, the first criterion concerns the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).
488. The ACCC considers that using asset lives that better reflect the appropriate economic life of the cable assets used in the CAN will better reflect the efficient forward-looking cost of Telstra's CAN and ULLS and better promote competition. Appropriate asset lives will allow the access provider and access seeker to compete in downstream markets on their relative merits. The ACCC considers that adopting the previously used asset life for main cable would inflate costs for access seekers and inhibit competition on the merits. Similarly, the previously used asset life for distribution cable may have inhibited Telstra's ability to compete as it may have lead to cost under-recovery.
489. The ACCC does not consider that the approach adopted on this issue affects the objective of achieving any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) affected by this decision.

490. Turning to the objective of encouraging economic efficiency in use or investment (paragraph 152AB(2)(e)), the ACCC considers that the asset lives used will better encourage efficiencies. The ACCC considers that its approach will better lead to investment and efficient use of infrastructure related to the provision of downstream DSL and voice services. This is because a cost-reflective price, more consistent with the outcomes in a competitive market for the ULLS, will encourage competition in downstream services and encourage efficiencies in markets for these services. The ACCC considers that the pricing approach will also lead to more efficient build/buy decisions as the ULLS prices will reflect the efficient cost of the CAN, as the appropriate asset lives would have been used to price the network.
491. The next criterion is the legitimate business interests of the provider and its investment in the CAN which is used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b). As the asset lives better reflect the asset lives of the CAN, they will allow a better estimate of the cost of the CAN and will allow a level of cost recovery necessary to meet Telstra's legitimate business interests. A too-long distribution cable life may have impacted negatively on Telstra's legitimate business interests, while a too-short main distribution cable life may have recovered more than necessary for Telstra's legitimate business interests.
492. The next criterion is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The ACCC similarly considers that the asset lives used will best meet the interests of access seekers in being able to compete on their merits. The asset lives used would lead to an efficient forward-looking ULLS network cost, allowing access seekers from competing with Telstra on their merits.
493. The next criterion is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, either to itself or to ULLS access seekers. In this context, the criterion involves consideration of whether Telstra will be able to recover its network costs inclusive of a normal risk-adjusted return on its capital employed. As noted above in the ACCC's consideration of paragraph 152CR(1)(b), the asset lives used will better estimate the costs of the CAN. Accordingly the ACCC considers that the asset lives used allow the recovery of direct costs.
494. The ACCC does not consider that the matters in paragraph 152CR(1)(e) and (f) materially contribute to consideration of the appropriate asset lives. In relation to paragraph 152CR(1)(g), the ACCC has considered efficiency incentives in its consideration of the LTIE above.
495. Therefore the ACCC will use the asset lives of 12 years for main cable and 20 years for distribution cable as it considers these are appropriate given the TSLRIC+ pricing principles and the subsection 152CR(1) matters.

Network provisioning, O&M factors, network planning and network design

496. In its consultation paper, the ACCC noted a number of specific concerns it had raised about the PIE II model assumptions and inputs. These concerns relate to network provisioning, operating and maintenance (O&M) factors, network planning costs and

network design algorithms. These concerns apply equally to the updated version of PIE II provided by Telstra, as the underlying model architecture has not been changed.

497. In relation to network provisioning, the ACCC has in past undertaking assessments disagreed with Telstra on how the costs of provisioning for future demand should be recovered.³⁰⁶ In those assessments, Analysys and MJAEI also considered that, while modelling spare capacity is common for future provisioning, the cost implications in the PIE II model seemed to be overestimated.³⁰⁷
498. In relation to operational and maintenance factors, the ACCC has in the past expressed concerns about the manner in which O&M costs are calculated within the PIE II model. The PIE II model uses either the actual O&M costs directly (for copper cable and conduits) or uses the actual O&M costs to calculate a ratio of O&M costs to assets. In particular the ACCC had considered that it is unclear whether the historic O&M costs that are used in the model reflect efficient costs.³⁰⁸
499. In relation to network planning costs, the ACCC had historically been concerned that Telstra may be over-recovering network planning costs.³⁰⁹ These concerns relate to whether the costs in the PIE II model were recovering an alternative hypothetical network, and as to whether ongoing network planning costs should be already recovered in O&M costs. However, Telstra had provided submissions that it was only recovering normal ongoing planning costs and that these costs were not already recovered.³¹⁰
500. In relation to network design parameters, the ACCC noted in its assessment of Telstra's most recent ULLS undertaking three particular concerns about three network design parameters in the PIE II model:³¹¹
- the lack of clustering algorithms
 - use of rectilinear distance estimation
 - use of minimum spanning trees.
501. The ACCC expressed concerns that these characteristics of the PIE II network cost model may lead it to overstate the required lengths of cable and conduits in the network.

³⁰⁶ ACCC, *op cit*, p. 48

³⁰⁷ ACCC, *op cit*, p. 46-7.

³⁰⁸ ACCC, *op cit*, p.51.

³⁰⁹ ACCC, *Assessment of Telstra's ULLS and LSS monthly charge undertakings—final decision (public version)*, December 2005, pp. 99-100.

³¹⁰ ACCC, *op cit*, p. 100; Telstra, above n 283, p. 52.

³¹¹ ACCC, above n 35, p. 56-63.

502. The ACCC noted in its consultation paper that a number of its specific concerns with the PIE II model increased in importance as population density within a given exchange area diminished, reflecting public concerns of the ACCC.³¹² However, as it is not estimating costs for Band 4, the ACCC considers that some of its concerns about using the PIE II model to estimate costs in rural and regional areas are not in issue in these arbitrations.
503. Despite the concerns listed above, the ACCC adopted a preliminary position in its consultation paper for the DFDs of accepting Telstra's approach to provisioning, O&M, network planning and network design. The ACCC considered that the preliminary positions it had taken were conservative positions that would tend to result in a higher estimate of network costs than would otherwise be the case.

Submissions from parties

504. Telstra submits that the engineering rules used by the PIE II model are appropriate.³¹³ It also submits that the approach to O&M costs, as well as network planning, was appropriate and set out its approach taken to calculate those ratios.³¹⁴ Telstra further submits that the approach to provisioning for future demand and network planning was appropriate.³¹⁵
505. Optus notes that it is difficult to adjust the PIE II model for issues such as network provisioning or network design parameters, although it submits that it has concerns about such parameters in the model.³¹⁶ It contends that it would be appropriate to adjust network planning costs based on international benchmarks.
506. PowerTel and Request note previously expressed concerns with the PIE II model, such as O&M factors and network planning costs.³¹⁷ Similarly, Chime notes previously expressed concerns that were discussed in the ACCC's consultation paper.³¹⁸
507. Primus also notes the concerns listed in the ACCC's consultation paper.³¹⁹ It also raises particular concerns about provisioning in the model, submitting that the PIE II model appears to provision up to two pairs per SIO and that this is excessive.
508. Telstra's reply submission responds to these concerns of the access seekers.³²⁰ Telstra submits that the PIE II model's provisioning is not excessive, given the potential for

³¹² ACCC, *op cit*, p. 78.

³¹³ Telstra, above n 46, p. 84, Annexure 13, p. 100, Annexure 15.

³¹⁴ Telstra, *op cit*, p. 100, Annexure 15 and Annexure 14.

³¹⁵ Telstra, *op cit*, pp. 98-9, Annexure 15.

³¹⁶ Optus, above n 53, pp. 9, 11.

³¹⁷ PowerTel and Request, above n 53, pp. 16-7.

³¹⁸ Chime, above n 204, p. 2.

³¹⁹ Primus, above n 206, p. 2.

³²⁰ Telstra, above n 44, p. 5.

future growth and demand, and the fact that such growth is uneven. It submits that the network planning costs are appropriate and that in any case Optus's concerns about the size of indirect O&M costs and network planning costs are incorrect.

ACCC's views

509. The ACCC notes the access seeker parties' views regarding the potential concerns about the PIE II model, and notes that Telstra has responded on those concerns. The ACCC further notes that it is difficult or impossible to adjust the PIE II model for some of these concerns. In particular, the provisioning and network design approaches in the model cannot be changed, and it would be difficult to make an exogenous adjustment to the model's outputs to account for them. The ACCC considers that it will accept Telstra's position that network planning costs are not over-recovered in the PIE II model, noting Telstra's submissions in that regard. However, the ACCC notes that the situation with respect to O&M costs is unclear, as the relationship of the costs to efficient costs cannot be assessed.
510. The ACCC retains concerns about each of these aspects of the PIE II model and notes that it could be considered that adopting Telstra's proposed inputs is conservative and tends to result in higher costs. The ACCC's conservative position does not indicate that it accepts Telstra's methodology or estimation approaches, or that the ACCC no longer holds previously expressed concerns. However, it considers that, for the purpose of final determinations, it will accept Telstra's submissions as an appropriate and pragmatic approach, given the difficulty or impossibility of adjusting for them.

Exogenous adjustments to PIE II's network cost estimates

511. In the context of assessing Telstra's ULLS monthly charge access undertaking from December 2005, Telstra submitted that exogenous adjustments should be made to the PIE II model's estimates of network costs. It submitted that these were necessary to account for the following factors:
- lead-in costs
 - trenching cost uplifts
 - a cable distance uplift to account for gradients
 - a cable distance uplift to account for obstacles.
512. The ACCC was not satisfied that the exogenous adjustments were reasonable. Telstra again raised exogenous adjustments as an issue in the consultation on interim determinations in these disputes. It submitted that the ACCC should take these exogenous adjustments into account when setting prices.

513. In reviewing Telstra's access undertaking, the Tribunal concluded in regard to Telstra's claimed exogenous adjustments that:³²¹

...having assessed the evidence provided by Telstra in support of the exogenous adjustments, we are not satisfied that Telstra has provided sufficient evidence to support its contention that the exogenous adjustments should be made to the cost estimates produced by the PIE II model. Although there was extensive material tendered by Telstra, the material that was put before us was little more than a technical recitation of the manner in which each of the adjustments had been calculated. The material did not support the reasonableness of the adjustments nor did it satisfy us that the adjustments were necessary to correct deficiencies in the model.

514. However, the Tribunal also held the view that, if these costs were legitimate and were not recovered, then they should be accounted for. It was not relevant whether the cost was made endogenously or exogenously to the PIE II model.³²²
515. Reflecting its view from its undertaking assessment, the ACCC's preliminary position as outlined in its consultation paper on the exogenous adjustments proposed by Telstra in its undertaking submissions were that it did not consider that the adjustments should be allowed.
516. The ACCC considers each of Telstra's claimed exogenous adjustments below.

Lead-in costs

517. Telstra contended in its submission to the ACCC's draft decision on Telstra's December 2005 draft undertakings that the ACCC should add an exogenous lead-in cost to ULLS network costs as calculated by the PIE II model.³²³ This represented a departure from Telstra's previous position that the cost of lead-ins is recovered through the amounts charged for connections.³²⁴
518. In setting prices for the DFDs, the ACCC's preliminary position outlined in its consultation paper was that it should not add an allowance for lead-ins to the network costs as calculated in the PIE II model This was because:
- the ACCC considers that lead-in costs, being once-off costs associated with connecting a service, would more appropriately be recovered through connection charges

³²¹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [373].

³²² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [371] to [372].

³²³ Telstra, above n 283, pp. 22-3.

³²⁴ Telstra, *Telstra's detailed submission in support of its undertakings dated 9 January 2003*, 31 July 2003, p. 31.

- the ACCC cannot be satisfied that the cost of lead-ins are not already fully or partially recovered by connection charges charged by Telstra³²⁵
- lead-in costs may be already recovered in O&M costs
- the methodology which Telstra used to support its claimed exogenous estimate of lead-in costs, in the undertaking assessment,³²⁶ is insufficiently detailed on information such as price trends or discount rates
- the PIE II model already has an asset cost category for lead-ins, and altering inputs (such as price trends) for that category would appear to already affect ULLS prices.

519. The consultation paper sought parties' views on this position.

Submissions from parties

520. Telstra submits that a \$[c-i-c], \$[c-i-c] and \$[c-i-c] exogenous lead-in cost should be added to the PIE II model network costs in 2005/06, 2006/07 and 2007/08 respectively.³²⁷ That amount represents an annualised recovery over [c-i-c] years of \$[c-i-c], \$[c-i-c] and \$[c-i-c] in the same three years. The amounts are calculated by multiplying a wage rate by an estimate of time taken to install a lead-in.
521. Telstra submits that it is reasonable and necessary that the ULLS network costs estimated by the PIE II model be increased in its proposed way to account for these costs because:³²⁸
- lead-ins are part of the forward-looking costs of providing ULLS
 - it would be inappropriate to expense the costs or recover them in connection charges
 - the costs are not included in ULLS cost estimates in the model.
522. Telstra also submits that the ACCC's concern that the cost of lead-ins are already fully or partially recovered by connection charges is unfounded because:³²⁹
- revenues from the past are not a relevant consideration to forward-looking costs

³²⁵ Telstra, *Our Customer Terms, Basic telephone service section, Part A – General*, 31 August 2007, accessed on 6 December 2007 at <http://www.telstra.com.au/customerterms/docs/fixed_general.pdf>, p. 7.

³²⁶ Briggs, Andrew, *Supplementary statement of Andrew Harvey Briggs*, 11 August 2006, p. 3.

³²⁷ Telstra, above n 46, p. 32.

³²⁸ Telstra, *op cit*, p. 33.

³²⁹ *Ibid*, p. 33.

- the connection fees for connection work depend on the work required to connect the service and do not contribute to ongoing costs of the lead-ins
- historical connection revenues have not recovered lead-in costs.

523. Optus' initial submission states that it accepts the ACCC's preliminary view not to make any exogenous adjustment for lead-ins.³³⁰ Primus states that it agrees with the ACCC's preliminary approach to lead-in costs and states that it considers that Telstra has miscalculated in its calculations, as lead-in costs are generally incurred by developers and that lead-in costs should not be based on all SIOs.³³¹ Telstra in response states that only trenching costs are incurred by developers and that it is appropriate to recover the costs associated with all SIOs in a forward-looking cost exercise.³³² PowerTel/Request reference the Tribunal's rejection of the exogenous adjustments and state that they support the ACCC's position to treat lead-in costs as already being recovered.³³³ Telstra stated in its third submission that, if these costs were to be treated as already recovered in connection charges, the ACCC must add them into ULLS connection charges.³³⁴

ACCC's view

524. The ACCC notes firstly that lead-in costs are a legitimate expense and that those costs should be recovered. However, the ACCC considers that those costs should not be recovered in ULLS monthly charges.
525. The ACCC notes that the Telstra's lead-in cost adjustment is based on a once-off cost of around \$[c-i-c] to perform wiring of the lead-in. The ACCC considers that this cost is already recovered by Telstra separately in its connection charges.
526. In particular, Telstra charges a \$299 fee for every service that is connected at premises where a telephone service has not been connected previously, or where the connection requires a technician to visit and undertake cabling work. This compares to a \$125 fee where a previous service existed and a technician must visit, but no cabling is required. The ACCC considers that the \$174 difference in the fees represents the cost of undertaking cabling work at the customer premises and accordingly allows recovery of the cost of lead-ins. As such a fee has been charged at least once for all connections made, the ACCC considers that the cost of lead-ins is adequately recovered. The ACCC considers that, as a once-off cost, it is more appropriate that lead-in costs be treated as a once-off charge in the way they currently are.
527. The ACCC further considers that Telstra's submissions that in a forward-looking

³³⁰ Optus, above n 53, p. 13.

³³¹ Primus, above n 206, p. 13.

³³² Telstra, above n 46, p. 6.

³³³ PowerTel and Request, above n 53, pp. 7, 41.

³³⁴ Telstra, above n 46, p. 20.

model past fees should be ignored as a new network would have to be built and lead-ins deployed misapprehends the forward-looking concept. The forward-looking concept does not extend to recovering costs that are already recovered through separate connection charges.

528. The ACCC also considers that Telstra's submissions about lead-in costs failing to contribute to ongoing costs to be mistaken. The recovery of a cost over time does not mean that the cost is contributing to ongoing costs. Rather it is a once-off charge that is recovered over a number of years.
529. Accordingly, the ACCC considers that including Telstra's claimed lead-in costs uplift would lead to Telstra recovering more than its efficient costs of provision of the ULLS. This would lead to reduced competition and send inefficient signals for investment. The ACCC further considers that this would lead to Telstra recovering more than required to serve its legitimate business interests and recover direct costs. The ACCC further considers that including these costs would adversely affect the interests of access seekers in competing with Telstra on their relative merits.

Trenching cost uplifts

530. Telstra also contended in its submission to the ACCC's draft decision on Telstra's December 2005 draft undertakings that the ACCC should add an exogenous trenching cost of around \$[c-i-c] to \$[c-i-c] per month (depending on geographic band) to ULLS network costs as calculated by the PIE II model.³³⁵ Telstra submitted that this was to account for having to bore trenches under driveways or concrete pathways, and/or for the costs of backfilling with soil and re-turfing.
531. In setting prices for the DFDs, the ACCC's preliminary position outlined in its consultation paper was to not add an amount to the PIE II model's network costs to account for trenching cost uplifts. This was because:
- the costs of backfilling with soil and reinstating with turf would appear to already be included in the PIE II model, based on previous advice by Telstra in 2003 and the content of the model³³⁶
 - Telstra had not previously provided sufficient detail about how these claimed uplifts were derived and applied to the PIE II estimates of network costs
 - it was unclear whether the exogenous uplifts can be sufficiently related to estimates arising from the PIE II model.
532. The consultation paper sought parties' views on this position.

³³⁵ Telstra, above n 283, pp. 23-6.

³³⁶ The "Non_PRM_Data" table in 'Costing.mdb' in the PIE II model contains items for the laying of turf and reinstatement of soil.

Submissions from parties

533. Telstra submits that it is necessary to allow a trench uplift to allow for the fact that trenches must cross driveways or be laid under concrete pathways.³³⁷ The uplifts proposed are based on the cost of trenching in turfed areas compared to trenching in paved areas where pavement must be broken up and re-laid, and to trenching where underground boring must be used under driveways. Telstra submits, based on its contractor rates, that trenching in paved areas costs \$[c-i-c] per metre, that trenching in turfed areas and boring under driveways costs \$[c-i-c] per metre and that trenching in completely turfed areas costs \$[c-i-c].³³⁸
534. Telstra then applies these rates depending on the proportion of paved kerb found in each of the capital city ESAs, and applies the uplifts to the trenching assets in the PIE II model. Telstra submits that the uplift was necessary because the PIE II model does not have cost categories for driveways and concrete pathways, nor for soil and turf reinstatement for main cable and IEN cable. Telstra submits that these are legitimate costs.
535. Optus' initial submission states that it accepts the ACCC's preliminary view not to make any exogenous adjustment for trench uplifts.³³⁹ Primus questions whether historical costs or quotes would take into account factors Telstra has claimed are not accounted for.³⁴⁰ Telstra in its reply submission responds that those items are not listed in PIE II and provides a table listing trenching costs.³⁴¹ PowerTel and Request reference the Tribunal's rejection of the exogenous adjustments.³⁴²
536. Access seeker parties did not make submissions on Telstra's late submitted trenching cost uplifts spreadsheet that was provided to them in December 2007.

ACCC's views

537. The ACCC considers that trenching costs are a real and significant cost of the ULLS. It also notes that, to the extent any particular efficient cost of deploying the network is not recovered, not including that cost would not allow the recovery of direct costs and would not meet the legitimate business interests of the access provider.

³³⁷ Telstra, above n 46, p. 34.

³³⁸ Telstra, *op cit*, p. 198, Annexure 23.

³³⁹ Optus, above n 53, p. 13.

³⁴⁰ Optus, *op cit*, p. 3.

³⁴¹ Telstra, above n 44, p. 7.

³⁴² PowerTel and Request, above n 53, p. 41.

538. The ACCC notes that Telstra's submissions about not recovering soil and turf costs for main and IEN cable directly contradicts previous advice to the ACCC from Telstra in 2003 that it had included these costs into PIE II.³⁴³
539. However, the ACCC considers that, more fundamentally, and as noted in its consultation paper, any exogenous adjustment must be sufficiently related to the costs in the PIE II model. In that regard, the ACCC notes that Telstra has stated that uplifts must be applied to all network elements which make up trenching, including conduit, duct, pits and manholes.
540. Telstra has stated that the appropriate markups should be based on the proportional costs of laying distribution pipe in a paved area or area with driveways, compared to the cost of laying distribution pipe in a completely turfed area. The ACCC's concern with this approach is that this markup is then applied to all trenching assets. However, trenching in the PIE II model is costed on a variety of different prices, depending on the type of trench laid and the location. The ACCC considers that it is not appropriate to simply apply a ratio of distribution trenching costs to all trenching assets in the network.
541. The fact that there are no explicit items in the model for laying concrete or boring is not a sufficient reason to add an uplift. It is necessary to consider the actual costs listed in the model and the proportion of assets for which an uplift would therefore be relevant or appropriate.
542. In particular, in most exchange areas there is a significant percentage of distribution cable that shares trenching with main cable.³⁴⁴ This trenching is already costed at significantly higher rates than the distribution cable only trenching within the PIE II model.³⁴⁵ The ACCC does not consider, therefore, that it would not be appropriate to uplift this cost by the ratio of distribution cable trenching costs. The proportions of distribution and main cabling sharing is higher in CBD and metropolitan areas, which are the areas Telstra identifies as requiring the largest trenching uplift. Similarly, there are significant areas of new estate trenches for which the uplifts would not be appropriate.
543. The ACCC accordingly considers that Telstra's proposed uplifts are inappropriate, as they seek to apply distribution cabling ratios to all trenching assets. The ACCC considers that the trenching costs in the model take into account Telstra's concerns. In

³⁴³ Telstra, *Telstra's response to the Australian Competition and Consumer Commission's Section 152BT information request*, 20 May 2003, p. 7.

³⁴⁴ The Costing module of the PIE II model contains tables titled "Trenching resources" "Trenching types conversion" "trench sharing reductions" and "PRM mapping table" that deal with the amount of trenching of particular types, the trenching costs and the cost items included in the trenching costs. A summary of the proportions of distribution only trenching, distribution shares with main trenching and distribution shares with main and IEN trenching can be observed in the PIE II model's trenching and ploughing report.

³⁴⁵ In Metropolitan areas the trenching cost for distribution cable only is priced at \$52.32 per metre, whereas the trenching cost where distribution cable and main cable is shared is priced at \$180.03 per metre. There are also additional costs for soil and turf, as well as a small allocation for road crossings.

areas with higher proportions of pavement, the large proportions of distribution-main cable sharing, which is priced at significantly higher trenching costs, should address Telstra's concerns.

544. In light of the above analysis, the ACCC considers that including the trenching uplift would tend to lead to costs higher than the costs of an efficient forward-looking network. This would tend to discourage competition and give incorrect signals for efficient investment in infrastructure. The ACCC also considers that including the uplift would lead Telstra to recover more than necessary to meet its legitimate business interests, including in recovering its direct costs. The ACCC considers that including the uplift would adversely affect the interests of access seekers in competing with Telstra on their merits.

Gradient and obstacle multiplier

545. Telstra has also asserted in the past that conservative elements of the PIE II model relating to gradient multipliers and obstacle uplifts needed to be accounted for.³⁴⁶ Telstra previously submitted that:
- a 1 per cent uplift in cable and trench distance should be added to account for the existence of a gradient in the real world
 - a 2 per cent uplift to cable and trench distances should be added to account for obstacle factors such as the fact that trenches are not always laid in straight lines.
546. In setting prices for the DFDs, the ACCC's preliminary position outlined in its consultation paper was to not add to the PIE II model's network costs to account for these claimed costs. This was because:
- Telstra had not presented any evidence about how the claimed uplifts were calculated
 - Telstra had not provided any indication of how these claimed uplifts would be applied to the PIE II model's estimates of network costs (even if such changes were to be considered appropriate), or of the resulting changes in costs that it considered would be appropriate
 - it was unclear that a blanket allowance for gradient and obstacles would be appropriate without knowing how the PIE II model designs a network in particular geographic locations that would warrant an allowance for gradients and/or obstacles.
547. The consultation paper sought parties' views on this position.

Submissions from parties

³⁴⁶ Telstra, above n 283, p. 26.

548. Telstra submits that the cost of trenches needed to be uplifted to reflect the fact that the PIE II model is flat and also that the PIE II model assumes that all trenches can be constructed in straight lines.³⁴⁷ Telstra submits that this was appropriate based on international experience, citing a report by its consultant Bridger Mitchell.³⁴⁸ Telstra submits that uplifts of between \$[c-i-c] and \$[c-i-c] (for 2006-07, depending on band) would be appropriate.
549. Optus' initial submission states that it accepts the ACCC's preliminary view not to make any exogenous adjustment for gradients and obstacles uplifts.³⁴⁹ PowerTel and Request reference the Tribunal's rejection of the exogenous adjustments.³⁵⁰

ACCC's view

550. The ACCC notes that Telstra has not explained exactly how it has derived the calculated uplifts claimed in its submissions. Accordingly there is some doubt about the amounts claimed. However, the ACCC notes that it is still relevant to consider whether it is necessary to allow uplifts for gradients and obstacles if those are not appropriately dealt with in the PIE II model.
551. Therefore the ACCC has closely examined the Mitchell commentary cited by Telstra as supporting its case for the addition of gradient and obstacle uplifts. Mitchell examines two US models. Mitchell observes that the Hybrid Cost Proxy Model (HCPM) allows for uplifts in cable distances where certain maximum or minimum slope characteristics are met in a particular area. Mitchell also notes that both the HCPM and HAI models allow for adjustments for road factors or uplifts that allow for the adjustment of difficult soil conditions.
552. Relevantly, however, Mitchell notes that the HCPM model only uses a road factor distance multiplier of greater than 1 for Cartesian distances. The uplift for rectilinear distances ranges 0.95 and 1.05. Similarly, the HAI model sets the distance uplift parameter to 1 and then increases the trenching and placement costs to account for difficult soil.
553. Based on Mitchell's analysis, the ACCC is satisfied that there is no evidence that a case can be made out that an uplift should be included for obstacle factors. The PIE II model accounts for different soil conditions in its different trenching costs, and uses rectilinear distances. Accordingly, the ACCC considers that there is no evidence that a case can be made out for an obstacle uplift based on international experience, as posited by Telstra. The ACCC considers that an obstacle uplift would lead to network cost estimates in excess of efficient forward-looking costs. This would lead to negative effects on competition and efficient investment decisions, and would negatively affect access seekers' interests in competing on their merits. It would also lead to Telstra recovering more than the direct costs of provisioning of the service,

³⁴⁷ Telstra, n 46, p. 36.

³⁴⁸ Mitchell, *ULLS supplementary commentary*, 14 August 2006.

³⁴⁹ Optus, above n 53, p. 13.

³⁵⁰ PowerTel and Request, above n 53, pp. 7, 41.

and more than needed to meet its legitimate business interests.

554. The ACCC notes that the HCPM model does allow for an adjustment for gradient uplift and that this is not accounted for by the PIE II. model While the HCPM model allows for an area-specific uplift, the ACCC notes that there clearly will be gradient in actual Australian conditions. Accordingly real world cable lengths would be increased from those modelled by PIE II. Accordingly, the ACCC considers that some uplift for gradient would be appropriate. This would lead to an amount that would better allow Telstra to recover the direct costs of provisioning of the ULLS, and an amount to meet its legitimate business interests.
555. With respect to the amount of gradient uplift that should be allowed, the ACCC notes that the uplift submitted by Telstra is not transparent. However, given the small scale of the uplift sought by Telstra and in the absence of a robust method to assess gradient in each ESA, the ACCC accepts Telstra's banded uplifts, scaled by the ratio of Telstra's network cost estimates to the ACCC's network cost estimates.

Overall conclusion on network costs

556. In assessing particular modelling assumptions the ACCC has had regard to the matters listed in section 152CR. The ACCC's view is that proper consideration of these matters is best achieved by taking into account whether cost assumptions and inputs better lead to an estimate of the efficient forward-looking network costs of the ULLS. In reaching its above conclusions, the ACCC considers that assumptions and inputs better resulting in efficient forward-looking network costs will:
- better promote the LTIE, as they will better promote competition and encourage the economically efficient use of and investment in infrastructure. The ACCC considers that efficient cost-reflective prices will allow access seekers and Telstra to compete on the basis of their relative efficiencies, and allow for appropriate build/buy decisions
 - allow Telstra to recover amounts necessary to protect its legitimate business interests, but not more than necessary. The ACCC also considers that efficient cost-reflective prices will allow Telstra to exploit the economies of scale and scope inherent in its network
 - allow access seekers to compete on their merits
 - reflect the direct costs of providing the ULLS
 - allow the recovery of sufficient costs to ensure the safe and reliable operation of the network.
557. The ACCC considers that the matters in paragraph 152CR(1)(e) are not likely to be material considerations to consideration of network costs. The ACCC considers that efficient forward-looking network costs will better lead to costs which match the TSLRIC+ pricing set out in the ULLS pricing principles. In certain cases, such as the ACCC's acceptance of the network design algorithms in the PIE II model, the ACCC

has had regard to its limited ability to amend underlying code in the model and to the requirement in subsection 152CLA(1) of the TPA to the desirability of resolving access disputes in a timely manner.

558. The ACCC's views on the issues discussed above, namely:

- whether to use the updated PIE II model with the ACCC's preferred inputs
- the WACC
- the price trends and the use of a tilted annuity
- the particular model inputs—trench sharing, asset lives, network planning, network provisioning, O&M factors and network design
- the possible exogenous uplifts to the PIE II model's costs

will better lead to an efficient forward-looking estimate of network costs and satisfy the relevant provisions of the TPA.

559. The network costs resulting from the ACCC's consideration of these issues are:

PIE II outputs

	2005-06	2006-07	2007-08
Band 1	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]
Band 2	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]
Band 3	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]

Gradient uplift

	2005-06	2006-07	2007-08
Band 1	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]
Band 2	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]
Band 3	\$ [c-i-c]	\$ [c-i-c]	\$ [c-i-c]

Total network costs

	2005-06	2006-07	2007-08
Band 1	\$ 3.13	\$ 3.48	\$ 3.67
Band 2	\$ 9.81	\$ 11.19	\$ 11.76
Band 3	\$ 22.54	\$ 24.77	\$ 25.98

560. These network costs differ from the network costs proposed in the DFDs due to:

- the use of the updated PIE II model provided by Telstra and the ACCC's abandonment of the roll-forward approach, which increased network cost estimates relative to the DFD prices

- the addition of a gradient uplift as submitted by Telstra, which increased network cost estimates relative to the DFD prices
- the five year reduction in distribution cable asset life, which increased network cost estimates relative to the DFD prices
- the two year increase in main cable life, which decreased network cost estimates relative to the DFD prices.

561. The effect of these changes has been to increase the estimate of network costs in Band 1, but decrease the estimate of network costs in Bands 2 and 3.

4.1.10 ‘Specific costs’

562. The term ‘specific costs’, in respect of the ULLS, refers to the incremental cost of providing the ULLS, and includes the costs associated with ordering, provisioning and qualifying a ULLS. Relevant cost categories could include IT system development and operational costs; connection costs; wholesale management costs; and indirect costs.³⁵¹

563. Some of these cost categories are recovered through ULLS connection charges, or other charges that Telstra imposes. Accordingly, it is not appropriate to recover these charges through ULLS monthly charges.

564. As per the ULLS pricing principles, ULLS prices should be cost based using a TSLRIC+ methodology.³⁵² The ULLS pricing principles provide additional guidance on the implementation of a TSLRIC+ methodology in relation to specific costs.

565. A number of matters have been identified as influencing the measurement of ‘specific-costs’ and the calculation of the access charge. The ACCC had regard to the section 152CR(1) criteria, and the ULLS pricing principles as required by subsection 152AQA(6) of the Act, in considering the approach to take on these matters. These issues were raised with the parties in the ACCC’s consultation paper and are discussed in turn below.

Cost allocation

566. The ACCC proposed to the parties in its consultation paper the following approach to cost allocation:

- firstly, to pool:
 - ‘specific costs’ associated with the ULLS

³⁵¹ ACCC, above n 5, p. 12.

³⁵² ACCC, *op cit*, pp. 9-11.

○ ‘specific costs’ associated with the LSS

- Telstra’s own internal costs of a nature equivalent to the specific costs of the LSS and ULLS, and
- secondly, allocate this pool to a demand base including all downstream ADSL services.

567. Under this approach, the costs to pool and allocate are limited to the like-for-like incremental costs associated with:

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

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

569. This approach is consistent with the previous views of the ACCC.³⁵³ It is also consistent with the views of the Tribunal as expressed in regard to both LSS monthly charges and ULLS monthly charges:³⁵⁴

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

570. The ACCC considers that the Tribunal’s guidance in its decision on ULLS monthly charges means that the ACCC must pool like-for-like specific costs related to ULLS, LSS and internal ADSL provisioning.

571. The ACCC considers that Telstra implicitly supplies the ULLS to itself (ie. it uses the copper pair) as an input into downstream Telstra retail fixed-line services.

Submissions from parties

572. Telstra opposes pooling, advocating that costs should be allocated only to the ULLS.³⁵⁵

573. Telstra submits that pooling is inconsistent with the direct cost criterion. In Telstra’s view, this criterion requires that the specific costs of the ULLS should be recovered solely from ULLS access charges, while the pooling approach does not measure or

³⁵³ ACCC, above n130, pp. 45-62, Appendix A; ACCC, above n 35 , pp. 132-145, Appendix E.

³⁵⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [387] to [413].

³⁵⁵ Telstra, above n 46, pp. 43-7, Annexure 24.

estimate costs in such a way to permit this.³⁵⁶

574. Telstra claims that the ACCC's impetus for adopting the pooling approach is to reduce costs faced by competitors. Telstra submits that while this would promote entry of competitors, this is not the same as promoting competition. In order to promote competition, access seekers should pay for costs of resources consumed in respect of the service.³⁵⁷
575. Telstra considers that the pooling approach will reduce incentives for efficient use of and investment in infrastructure. Telstra submits that the pooling approach denies Telstra the ability to exploit economies of scale and scope.³⁵⁸ Telstra submits that the pooling approach would distort investment in Telstra's own ADSL services, as it would require Telstra to share scale economies of those services. Telstra also submits that the use of the pooling approach would deter all potential facilities investors from seeking economies in alternative infrastructure.³⁵⁹
576. Telstra also considers the pooling method is inconsistent with its legitimate business interests, including its interest in exploiting economies of scale and scope to compete in downstream markets.³⁶⁰ It submits that its interests include but are not limited to recovering its legitimate costs. Telstra also contends that the pooling approach does not properly consider the interests of access seekers, and that this interest should not include subsidising or artificially advantaging such users.³⁶¹
577. Telstra also submits that the pooling approach is inconsistent with the TSLRIC+ approach in the ACCC's ULLS pricing principles. It submits that the principles require that ULLS charges be set at the TSLRIC+ of the ULLS alone. Telstra considers the pooling approach would not result in such a measure being derived.³⁶²
578. Telstra acknowledges that its views conflict with the Tribunal's decisions on this issue.³⁶³ Telstra however submits that there are two fundamental errors in the Tribunal's analysis. Firstly, it submits that the Tribunal only allowed Telstra to exploit economies of scale and scope up to the point of access, when it should be allowed to exploit all economies. Telstra also states that the Tribunal was wrong to assert that Telstra could impose higher costs on access seekers compared to its own costs as the ACCC would ensure that only efficient costs were recovered.
579. In its response to the ACCC's supplementary consultation paper, Telstra repeats and relies on its previous submission that specific costs should be recovered from ULLS

³⁵⁶ Telstra, *op cit*, pp. 43-4, Annexure 24, pp. 203-5.

³⁵⁷ Telstra, *op cit*, pp. 43-4, Annexure 24, pp. 205-7.

³⁵⁸ Telstra, *op cit*, p. 208, Annexure 24.

³⁵⁹ Telstra, *op cit*, p. 208, Annexure 24.

³⁶⁰ Telstra, *op cit*, p. 209, Annexure 24.

³⁶¹ Telstra, *op cit*, p. 211, Annexure 241.

³⁶² Telstra, *op cit*, p. 46.

³⁶³ Ibid.

users only. Telstra notes that in the context of the current arbitration, Telstra has not claimed a number of specific costs that it typically has in the past. Telstra further contends that the ACCC has failed to take into account some specific costs categories which should be included in calculating the specific costs component. In particular, Telstra submits that the ACCC has failed to follow its own TSLRIC+ approach by failing to include a contribution to indirect capital costs in its calculation of service specific costs for the ULLS.³⁶⁴

580. Optus submits that the appropriate demand base to allocate costs over is larger than just all ADSL services.³⁶⁵ Optus submits that the impact of ULLS prices is not restricted to ADSL services but may also affect voice services. It submits that accordingly the spread of costs should be across all CAN lines. It submits that distributing costs only to ADSL providers would not allow a level playing field for competition for voice customers. It submits that a wider distribution base would more closely approach competitive neutrality. It also submits that ULLS specific costs are caused by declaration of the service and that the beneficiary of such declaration is all end users of the CAN.³⁶⁶
581. In its submission to the ACCC's supplementary consultation paper, Optus repeats and relies on its previous submissions that it is appropriate for the ACCC to allocate ULLS specific costs across all potentially active DSL lines, or call lines – a broader allocation that proposed in the ULLS pricing principles.³⁶⁷
582. PowerTel and Request submit that there is a strong argument for adopting a broader basis on which to allocate ULLS specific costs.³⁶⁸ Powertel and Request submit that this is because the ULLS leads to lower consumer prices and increased quality of all telephone services and not just broadband. They also submit that Telstra has attempted to place all costs and uncertainties onto access seekers by using a ULLS lines only allocation. They submit that any alternative approach would give supernormal profits to Telstra.³⁶⁹ PowerTel and Request also submit that an broad recovery base would promote competition and efficient investment in infrastructure, allow Telstra to recover its legitimate costs and meet the interests of access seekers. They submit that all possible pooling approaches allow the recovery of direct costs. These submissions are referred to and repeated in their submission on the ACCC's supplementary consultation paper.³⁷⁰
583. Chime submits that the pooled recovery base should be across all copper lines, because the ULLS can be used to provide both ADSL and telephony, and therefore all customers accessing the CAN will benefit from ULLS price competition.³⁷¹ It also

³⁶⁴ Telstra, above n 20, pp. 6-7.

³⁶⁵ Optus, above n 53, p. 20.

³⁶⁶ Optus, *op cit*, p. 21.

³⁶⁷ Optus, above n 25, p. 2.

³⁶⁸ PowerTel and Request, above n 53, p. 20.

³⁶⁹ PowerTel and Request, *op cit*, p. 24.

³⁷⁰ PowerTel and Request, above n 25, p. 3.

³⁷¹ Chime, above n 204, p. 3.

submits that Telstra's legitimate commercial interests will be fully met under a wider recovery base. Primus makes equivalent submissions.³⁷²

584. Macquarie agrees with the ACCC's analysis of cost allocation in the ULLS pricing principles and submits the ACCC should adopt the allocation of costs across a broader range of services, consistent with the pricing principles, than those advocated by Telstra.³⁷³
585. In response to the submissions of access seekers, Telstra submits that the benefits of competition do not imply that one competitor must subsidise another.³⁷⁴ It submits that competition does not require rival firms to all have the same costs, but rather that competitive neutrality only requires that where firms use the common infrastructure, the costs are allocated to each firm on an equal basis. However it submits that specific costs are not 'common to all firms'.³⁷⁵ Telstra also restates its views around economies of scale and efficient investment. It also submits that Chime and Primus are incorrect to say that Telstra will recover its costs under any allocation method. It further submits that profitability is irrelevant to allocation and would discourage investment in products that are likely to be successful.³⁷⁶ Telstra also rejects PowerTel and Request's submissions about the efficiency of Telstra's systems.

ACCC's views

586. The 'pooling approach' the ACCC proposed has been adopted previously for both the ULLS and the LSS.³⁷⁷ The pooling approach is also adopted in the ACCC's pricing principles for the ULLS.³⁷⁸
587. It is also consistent with the reasoning of the Tribunal on both LSS monthly charges and ULLS monthly charges. In finding that Telstra's then proposed approach to cost allocation was not reasonable (under section 152AH of the TPA), the Tribunal adopted a pooling approach as the comparator. In discussing the likely effect on competition of these two approaches to cost allocation, the Tribunal stated that:³⁷⁹

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

³⁷² Primus, above n 206, p. 4.

³⁷³ Macquarie, above n 25, p. 2.

³⁷⁴ Telstra, above n 46, p. 23.

³⁷⁵ Ibid.

³⁷⁶ Telstra, *op cit*, p. 24.

³⁷⁷ ACCC, above n 130, pp. 45-62, Appendix A; ACCC, above n 35, pp 132-145, Appendix E.

³⁷⁸ ACCC, above n 5, p. 16.

³⁷⁹ *Telstra Corporation Limited (ACN 051 775 556) [2006] ACompT 4* (2 June 2006) at [150].

providers of DSL services using Telstra's CAN would face the same non retailing costs of providing their services.

588. The Tribunal concluded that costs should be pooled, although it was not necessary for the Tribunal to express a concluded view on the demand base over which these costs should be spread. In its view, the demand base comprised at least downstream DSL services.
589. As noted above, the Tribunal also considered this issue in the context of ULLS monthly charges. The Tribunal again concluded that the pooling approach should be adopted, and that Telstra's proposed approach to specific costs was unreasonable.³⁸⁰
590. The ACCC concurs with the reasoning of the Tribunal on this issue, and does not agree with Telstra's claims that the Tribunal was in fundamental error in twice reaching the view that the pooling approach should be adopted.
591. Adopting Telstra's position on this issue (i.e. that 'ULLS specific costs' should be recovered only from ULLS lines) would lead to a higher access charge than what was proposed, and which results from the pooling approach. Telstra claims that it is this result that provides the impetus for the ACCC's preference for the pooling approach. However, this is not the case. The ACCC's preference for the pooling approach results from its detailed consideration of the alternative approaches against the subsection 152CR(1) criteria and the ULLS pricing principles. In this regard, the ACCC considers that the higher charges that results from Telstra's approach cannot be supported by those criteria and principles. Adopting the access seeker's favoured approach of allocating the specific costs over all lines would reduce the ULLS monthly charge.
592. The ACCC has considered the views the parties have advanced, but remains of the view that the approach it proposed is to be preferred having regard to the subsection 152CR(1) matters and ULLS pricing principles. It follows that the ACCC does not accept Telstra's view that the approach Telstra has advocated better meets the subsection 152CR(1) criteria or the ULLS pricing principles.

Consideration against subsection 152CR(1) criteria

Paragraph 152CR(1)(a)

593. The first criterion concerns the promotion of the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).

³⁸⁰ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [387] to [413].

594. The ACCC considers that its proposed approach, as compared to the Telstra approach, better promotes competition, by better enabling ULLS (and LSS) based service providers to compete on an equal footing with Telstra's wholesale and retail DSL services. The ACCC considers that ULLS and LSS-based supply has to date brought benefits to end-users in relevant service areas, in particular, by supporting higher quality, ADSL2+, services. This has encouraged competition in downstream DSL markets in particular. An unequal footing between Telstra and access seekers would tend to lessen competition in those markets and also the associated fixed voice market.
595. This does not mean that Telstra and access seekers will face equivalent costs across all stages of production, as Telstra and ULLS access seekers will each separately transform the ULLS into downstream services, and in doing so will make investments and incur significant additional costs. It does mean, however, that for those cost categories that are within the control of Telstra, ULLS access seekers will face the same level of costs. The ACCC does not accept that the access regime removes these cost categories from Telstra's control.
596. The ACCC does not agree with Telstra's view that the pooling approach underestimates TSLRIC+, and hence will not promote competition, due to a potential for entry by inefficient firms. The ACCC considers that the pooling approach measures the TSLRIC+ of (the specific costs of) the ULLS, and that this measure is appropriate for use in deriving the ULLS monthly charges. Hence, the ACCC does not accept that the pooling approach will subsidise inefficient entry, or otherwise will not promote competition. The ACCC considers that the pooling approach will lead to competition between parties on their merits, rather than subsidising inefficient entry. However, not implementing the pooling approach would mean Telstra would have less incentive to obtain efficiencies.
597. It can be noted however that Telstra does not object to pooling per se, given that it also puts forward a ULLS cost estimate based on CCA data primarily consisting of allocations made from higher level cost pools, rather than allocated directly to the ULLS. What is in issue here is the type of 'pooling' and transparency with which the 'pooling' is undertaken.
598. Further, in its submissions in these proceedings, Telstra accepts that allocating costs associated with common infrastructure on an equivalent basis would promote competition. Telstra concludes, however, that allocating specific costs on such a basis would not promote competition.
599. It is not disputed that it is Telstra's ordering and provisioning systems and common associated infrastructure and processes that are used to provide the relevant functionality to support each of the LSS, ULLS, and the internal equivalent inputs used by Telstra's retail and wholesale divisions. That is, it is Telstra's systems that are used to receive customer orders, qualify the requested services and to arrange the necessary exchange based work etc. Further, for certain products such as the LSS and wholesale ADSL, the exact same systems are used for each such step including the

client interface (“LOLO”) that is used to submit orders.³⁸¹

600. The ACCC considers conducting this assessment at a lower level, and considering each program that is run on Telstra’s computer systems in providing this common functionality, is unnecessary. What is important is that common systems are used to provide common functionality, and that each of these is under the control of Telstra.
601. It is possible that the access seekers’ advocated all CAN lines approach could further promote competition, should it lead to conditions that were more conducive to competitive entry by LSS and ULLS based suppliers in both DSL and voice markets. However, the ACCC considers that the ULLS is currently being used to a limited extent to provide only downstream voice services.
602. The ACCC does not consider that the approach adopted on this issue affects the objective of achieving any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) affected by this decision.
603. Turning to the objective of encouraging economic efficiency in use or investment (paragraph 152AB(2)(e)), the ACCC considers that the different level of unit costs that would likely be allocated to Telstra and access seekers, respectively, under Telstra’s submitted approach would not represent the relative efficiency of Telstra compared to ULLS (and LSS) access seekers. As noted already, the incremental costs are those of internal Telstra systems, which are passed through to access seekers, and do not reflect decisions or practices of access seekers. The ACCC notes the views of the Tribunal in this regard, where it stated that “it is important to recognise in this context that access seekers such as Optus and the other intervenors have no control over, or say in, the development of the ULLS specific costs”.³⁸²
604. The ACCC considers that Telstra’s approach would tend towards encouraging less efficient use of and investment in the infrastructure used in providing common ordering and provisioning functionality for LSS, ULLS, and DSL services. While the pooling approach ensures that access seekers and Telstra each face their share of the cost for this functionality, there is no assurance that Telstra’s approach would achieve this. Under Telstra’s approach, there is a likelihood that differentiated unit costs for this common functionality would be allocated to the LSS, ULLS and Telstra’s DSL services. Further, as associated costs would only be met from access seekers, Telstra would have less incentive to ensure that investments that it could subsequently attribute to external supply of the ULLS were necessary and implemented at efficient cost levels. Higher resulting unit costs for external access seekers would discourage use of LSS and ULLS below efficient levels. These inefficiencies would flow through to downstream services and discourage the efficient investment in infrastructure used to supply downstream DSL services.
605. The ACCC does not accept that the pooling approach amounts to basing cost allocations on profitability, and hence does not accept that the pooling approach

³⁸¹ Telstra, above n 44, p. 25.

³⁸² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [401].

would thereby reduce incentives to invest in successful products.

606. Nor does the ACCC accept that one or other of the approaches would be likely to promote efficient investment in access network infrastructure. The ACCC considers that Telstra has strong incentives to invest in its CAN given the excess of revenues to cost Telstra reports in its RAF returns for products supplied over the CAN. The ACCC does not consider that ULLS access seekers would be likely to invest in a duplicative CAN as a result of the approach to this issue.
607. Telstra contends that the pooling approach is contrary to its legitimate commercial interests, as it would prevent Telstra from fully exploiting economies of scale and scope that would otherwise be open to it. Telstra considers that the pooling approach means that Telstra is required to share a portion of the economies it realises in providing access. Telstra's contention focuses on the exploitation of some of the economies that are realised in providing access, and ignores the other economies potentially available in transforming this access into downstream services.
608. The ACCC considers that Telstra's ability to exploit economies of scale and scope over all stages of production involved in supplying services to end-users would be greater under the ACCC's approach. This is because the pooling approach will expand demand for downstream services, as well as access, as by promoting competition it leads to the supply of downstream services that are of higher quality, of greater variety and/or more competitively priced. This increase in demand will generate strong economies of scale and scope, due to the presence of fixed costs. These economies of scale and scope will be, as the Tribunal has found, open to Telstra to exploit.³⁸³
609. The ACCC has discussed investment incentives above. The ACCC considers that the pooling approach provides incentives to Telstra and LSS access seekers to each invest in infrastructure by which downstream DSL services are supplied. By providing for a normal, risk-adjusted return on investment, the ACCC has had regard for risks in making this investment.

Paragraph 152CR(1)(b)

610. The next criterion is the legitimate business interests of the provider and its investment in facilities used to provide the ULLS (paragraph 152CR(1)(b)). Telstra's legitimate business interests are discussed in considering legitimate commercial interests under the first criterion. In this context, the criterion involves consideration of whether Telstra will be able to recover its costs, including the direct costs associated with the ULLS, and a normal risk-adjusted return on its capital employed. These matters are discussed under the criterion in paragraph 152CR(1)(d). The ACCC considers that Telstra's legitimate business interests will be satisfied under the ACCC's 'pooling' approach.
611. Telstra submits that the pooling approach is inconsistent with the 'direct costs criterion', on the basis that it does not lead to specific costs being recovered only

³⁸³ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [409] and [410].

from charges paid by ULLS access seekers. This submission was considered by the Tribunal in reaching its view that the pooling approach would satisfy this criterion. As the Tribunal has noted, there may be a variety of allocation methods that would enable Telstra to recover its direct costs. Provided that Telstra is able to recover its direct costs under the cost allocation method, then the criterion is satisfied.³⁸⁴ The ACCC agrees that the pooling approach will permit the recovery of direct costs, as Telstra will be able to include the equivalent increment in charges for all LSS, ULLS and downstream services.

Paragraph 152CR(1)(c)

612. The next criterion is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The access seekers' interest lies in being able to enter markets and compete on their relative merits. The ACCC considers that in this context it is access seekers' ability to enter downstream DSL and voice markets that should be assessed. The ACCC considers that its approach satisfies these interests. Telstra's proposed approach would not, as it would necessarily inflate ULLS access seekers' cost base above TSLRIC+ and relative to Telstra's cost base. This would be detrimental to access seekers' interests and impede their ability to enter markets and supply downstream services.

Paragraph 152CR(1)(d)

613. The next criterion is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, either to itself or to ULLS access seekers. In this context, the criterion involves consideration of whether Telstra will be able to recover its 'ULLS specific costs' inclusive of a normal risk-adjusted return on its capital employed.
614. The pooling of costs associated with the external supply of the ULLS and its internal provisioning could not compromise Telstra's ability to recover its direct costs of providing access to the ULLS. What is involved here is ensuring that each instance of ULLS provision is considered in deriving the associated unit cost.
615. Further, as discussed above, the inclusion of "LSS-specific costs" in determining the "ULLS-specific" costs is appropriate given the commonality in underlying functionality and the use of Telstra systems involved in each case.

Paragraphs 152CR(1)(e) & (f)

616. The cost of extensions to Telstra's ordering systems necessary to supply the LSS or ULLS have been taken into account (paragraph 152CR(1)(e)). The Commission does not consider that the 'operational and technical requirements' criterion materially contributes to this decision (paragraph 152CR(1)(f)).

³⁸⁴ *Telstra Corporation Limited (ACN 051 775 556) [2006] ACompT 4 (2 June 2006) at [139].*

Paragraph 152CR(1)(g)

617. The ACCC has considered which approach should be favoured in terms of enabling a carriage service, telecommunications network or facility to be operated efficiently. The criterion calls for consideration to be given, in this instance, to services, networks and facilities associated with the ULLS, LSS and downstream DSL services, of the access provider, the access seeker, and any other downstream service providers.
618. The ACCC considers that its proposed approach strikes the best balance. It will promote competition in downstream services, which will in turn encourage efficiencies in markets for these services. The Tribunal has stated that it is possible that that allocative efficiency in the upstream supply of ULLS or LSS would be reduced to a small extent, but that the resulting efficiencies in the downstream DSL markets would far outweigh this.
619. Turning to the ULLS pricing principles, the parties accept that TSLRIC+ is the appropriate cost methodology to use. Telstra takes issue with the manner of the ACCC's implementation of the TSLRIC+ methodology, and in particular the adoption and application of the pooling approach. Telstra considers that the ULLS pricing principles should not be applied insofar as they require the adoption of the pooling approach and, if they are applied, all relevant cost categories should be included in ULLS specific costs.
620. The ACCC considers that its pooling approach is consistent with the current ULLS pricing principles and that these pricing principles should be applied. The ACCC considers that the pooling approach is also consistent with the previous pricing principles on which parties were initially consulted. This is because the pooling approach better ensures that all common Telstra infrastructure and associated services are considered in measuring the TSLRIC+ of the ULLS. Further, the ACCC considers that its pooling approach is the most consistent with the ULLS pricing principles of all approaches that have been proposed.

Summary

621. In summary, the ACCC considers that incremental costs should be pooled and allocated over downstream DSL services. The ACCC considers that this approach is supported by the subsection 152CR(1) criteria and the ULLS pricing principles, and, as compared to Telstra's approach and the access seekers' approach, better meets these considerations.
622. The ACCC notes the access seeker parties' submissions that an all lines allocation should be used to recover specific costs. The ACCC notes that the ULLS can be used to provide just voice and has noted the potential for an all lines allocation in the past.³⁸⁵ However, a key consideration has been the services that are typically supplied by means of the LSS and ULLS. The ACCC has not adopted an 'all-lines' allocation as it understands that, currently, the LSS and ULLS are used mainly where the end-

³⁸⁵ ACCC, above n 35, Appendix E.

user requires a DSL service, and that LSS and ULLS based supply is driving competition in DSL services. The ACCC understands that the use of ULLS to provide only voice is not likely to be widespread.

Weighted average cost of capital ('WACC')

623. The ACCC notes its conclusions in relation to WACC in its analysis of network costs. As noted in that section, the ACCC considers that one single WACC should be used for all assets supplied over the PSTN. Accordingly the conclusions drawn by the ACCC and discussed earlier in this statement of reasons in relation to the WACC and network costs apply equally to specific costs.

Levelisation period

Introduction

624. Levelisation refers to setting a charge to recover the costs of providing a service over a given timeframe, so that the charge does not vary from one period to the next within that timeframe. The ACCC proposed that a levelisation period should be adopted commencing on 1 July 2000 and ending on 30 June 2008.

Submissions from parties

625. Telstra's initial submission makes no comment on levelisation.³⁸⁶ PowerTel and Request accept the ACCC's approach to levelisation.³⁸⁷
626. Primus questions whether a levelisation period ending on 30 June 2008 is sufficient. It considers that it would not expect that the market for the ULLS and LSS would be fully matured by this stage, and requests that the ACCC consider extending the levelisation period.³⁸⁸ Chime submits that there is a lengthy period for access seekers to deploy the ULLS, on a site by site basis and requests that the ACCC consider extending the levelisation period to 30 June 2011.³⁸⁹ In response, Telstra advises that it opposes the levelisation period extending to 30 June 2011, submitting that it would impose substantial risk on Telstra due to demand uncertainty.³⁹⁰

ACCC's views

627. Levelisation can be appropriate for the period following the introduction of a service, or in other circumstances where demand levels are changing, and annualised costs attributed to various periods differ significantly. In these circumstances, the choice of timeframe over which to levelise costs can have a significant bearing on the per unit

³⁸⁶ Telstra, above n 46, p. 49.

³⁸⁷ PowerTel and Request, above n 53, p. 29.

³⁸⁸ Primus, above n 206, p. 5.

³⁸⁹ Chime, above n 204, pp. 3-5.

³⁹⁰ Telstra, above n 44, p. 20.

cost estimate.

628. This issue was considered by the Tribunal, which concluded that a levelisation period of four years for the LSS was too short.³⁹¹ The ACCC concurs with the Tribunal's reasoning on this issue and considers that it is equally applicable to the current context.
629. Adopting Primus' and Chime's position would likely tend towards a lower access charge, but the amount of any reduction is not known as implementing this approach would require more data.
630. The ACCC remains of the view that it is appropriate to levelise over the period from 1 July 2000 to 30 June 2008. A number of factors inform this approach:
- it draws upon the available data (as forecasts are available for the prospective period);
 - the access charge is reflective of charges expected in a reasonably mature market for the ULLS and internal and external line sharing, as a longer period is allowed for demand to mature; and,
 - it better ensures that costs can be recovered – for instance, if a previously proposed levelisation period of five years was adopted for incremental costs, it is possible that Telstra may not have recovered its costs due to lower than expected demand materialising.
631. While the demand for the ULLS itself may not mature for some time after 30 June 2008, the approach to cost allocation that has been adopted means that it is total demand for LSS, ULLS and downstream DSL services that informs incremental unit costs. While this total demand base is likely to continue to grow beyond 30 June 2008, these services as a whole have reached a significant level of penetration, and it is likely that the rate of growth in this total demand base will reduce. In these circumstances, there would be less reason to continue to levelise costs over multiple years.
632. As a result, a single ULLS specific cost has been specified for the entire period of the final determination (including any backdated operation).

Efficient costs (including efficient indirect capital costs), and tilting of annuity

633. The ACCC noted that Telstra's claimed ULLS 'specific costs' and 'LSS specific costs' (which are both taken into account in deriving the pooled specific costs) are actual incurred costs that have not been demonstrated to be efficient costs. However, the ACCC proposed in its consultation paper to adopt Telstra's claimed costs as being efficiently incurred costs for the purpose of the arbitrations. It was noted that this assumption might lead to a higher TSLRIC+ estimate of the pooled specific costs than

³⁹¹ *Telstra Corporation Limited (ACN 051 775 556) [2006] ACompT 4 (2 June 2006) at [120].*

would otherwise result.

Submissions from parties

634. Telstra submits that its costs are efficient, but submits that actual costs should be had regard to even if inefficient.³⁹² Telstra submits that the ACCC's estimates of costs should also include common costs of IT core systems, and an allocation of indirect capital costs.³⁹³
635. Telstra did not comment on the staff cost allowances or IT O&M (other than its submissions about IT core systems), but submits that if the tilt factor was removed from the model then the specific costs would be reduced by 1 cent.³⁹⁴
636. In its supplementary submission, Telstra submits that the ACCC has omitted indirect capital costs inter alia from the ACCC's cost model and contends that a contribution to indirect capital costs is consistent with the statutory criteria and the ACCC's own TSLRIC+ calculation of the ULLS. Telstra further submits that the ACCC has failed to address Telstra's previous submissions on this claimed deficiency.³⁹⁵
637. Optus raises concerns with the significant increase in IT O&M costs in 2005-06 and submits that the ACCC should adjust the costs down.³⁹⁶ PowerTel and Request submit that the ACCC's proposed approach is a conservative one.³⁹⁷ Chime questions the ACCC's proposed approach, given concerns expressed in the ACCC's undertaking assessment processes.³⁹⁸ Primus raises similar concerns.³⁹⁹ Telstra in response to these submissions reiterates that it considers its costs to be efficient.⁴⁰⁰

ACCC's views

638. Telstra has submitted that the ACCC should have regard to Telstra's actual costs as well as TSLRIC+ measures. The ACCC does not consider that ULLS charges should be set by reference to actual costs, consistent with the pricing principles and the long-held position of the ACCC and as endorsed by the Tribunal.
639. The ACCC accepts that an efficient provider of the ULLS would incur costs such as staff costs and IT O&M costs.

³⁹² Telstra, above n 46, p. 49.

³⁹³ Telstra, *op cit*, pp. 41-3.

³⁹⁴ Telstra, *op cit*, p. 49.

³⁹⁵ Telstra, above n 20, pp. 6-7.

³⁹⁶ Optus, above n 53, p. 20.

³⁹⁷ PowerTel and Request, above n 53, p. 30.

³⁹⁸ Chime, above n 204, p. 5.

³⁹⁹ Primus, above n 206, p. 5.

⁴⁰⁰ Telstra, above n 46, p. 20.

640. In relation to IT O&M costs, the ACCC notes that Optus submits that the costs should be decreased, while Telstra states that the costs should be increased. The ACCC notes that Telstra has previously stated that the increase in claimed IT O&M costs for 2005-06 onwards represented a greater proportion of ULLS transactions performed on common computer systems compared to other transaction types.⁴⁰¹ Accordingly, the ACCC considers that Telstra's concerns about understating the costs of IT are not founded as the increases in IT O&M costs account exactly for these increased costs. The ACCC notes that it applies these higher ULLS O&M costs to all ULLS, LSS and ADSL SIOs and that this is a conservative approach. The ACCC does not intend to increase IT costs as it considers that would be likely to overstate costs above an efficient forward-looking cost level.
641. The ACCC notes Optus' submission that IT O&M costs should be reduced. However the ACCC does not consider that this is practicably open to it without a basis for assessing the reduction in costs. As there is no basis for assessing the reduction, the ACCC considers that it will accept Telstra's claimed IT O&M costs.
642. In relation to a need to account for Telstra's claimed indirect capital costs, the ACCC notes that Telstra has suggested either adopting indirect capital ratios from the PIE II model or from wholesale transmission assets. Indirect capital may be a justifiable cost item, if the indirect capital items can be considered referable to the direct capital and the efficient forward-looking costs of the ULLS. As noted above in the analysis of Telstra's CCA model, there are a number of organisational asset items that could be considered to not be referable to supply of the ULLS. Furthermore Telstra proposes amortising such assets over [c-i-c] years in its Telstra CCA model, which would reduce the annualised level of costs claimed.
643. In reference to adopting an indirect capital ratio from the PIE II model, the ACCC notes that indirect capital calculations in the PIE II model are based on general ledger accounts and that ratios are dependent on asset type.⁴⁰² Telstra has not suggested a particular ratio to adopt from the numerous ratios in the PIE II model, although it elsewhere suggests using a 6 per cent uplift. The ACCC notes that software assets, which would be most comparable assets to the specific costs assets and hence the most appropriate ratio to apply, have an indirect capital uplift of 0 per cent in the PIE II model. Applying this ratio would obviously not affect the costs in the specific cost model. Other assets (which the ACCC considers are less referable to the specific costs) have between [c-i-c] per cent and [c-i-c] per cent allocated to them. The evidence from the PIE II model suggests an uplift in the order of 1 to 3 per cent would be appropriate. Even applying such an uplift to the specific cost assets would have a very small effect on the specific cost estimates (around 1 to 2c), which would be subsumed in the rounding of charges adopted by the ACCC.
644. In light of the above discussion the ACCC does not consider that the effect of including indirect capital in the specific cost model is material.

⁴⁰¹ ACCC, above n 35, p. 156, Appendix E.

⁴⁰² Telstra, above n 46, p. 94, Annexure 14.

645. The possibility remains in the ACCC's proposed approach of accepting Telstra's claimed costs that inefficient costs will remain in the cost base. However, the ACCC considers that the extent to which this would occur is relatively limited, given the small scale of the costs involved and the TSLRIC+ approach involved. Accordingly for the purpose of this arbitration, and while the claimed costs have not been proven to be efficient, the ACCC has accepted in full Telstra's cost claims from August 2006.
646. The ACCC notes that Telstra advocates not tilting the annuity in the specific cost model. However, the effect of tilting or not tilting the annuity is marginal and does not affect the rounded ULLS monthly charge. This can be observed by inputting '0' into relevant cells at row 3, of worksheet 'General data', in the ULLS monthly charges cost model that the ACCC provided to the parties with its consultation paper.

Telstra's internal equivalent costs

647. The ACCC noted to the parties in its consultation paper that Telstra has not made a cost claim for its internal equivalent costs, and invited Telstra to make such a claim. The ACCC proposed that if Telstra was unable to provide information regarding its internal equivalent costs, these would be estimated based upon the data that had been provided in respect of the ULLS. In particular, the ACCC proposed to estimate these costs on the basis that:
- the efficient internal equivalent operating ("opex") costs per line that Telstra incurs are the same as those that Telstra has claimed for the ULLS
 - the efficient internal equivalent capital costs that Telstra incurs are double the capital costs that Telstra has claimed for the ULLS, and incurred at the same time as the ULLS capital costs.

Submissions from parties

648. Telstra refers to previously supplied ADSL costs drawn from its accounting systems, and did not provide any data relating to its internal equivalent costs of line sharing.⁴⁰³ Telstra considers that the proposed allowance is arbitrary.
649. Optus submits that there is insufficient justification for the ACCC to take the position that the efficient internal equivalent capital costs are twice the actual ULLS capital costs and submits that it should assume they are equal to the actual ULLS capital costs.⁴⁰⁴ PowerTel and Request accept the ACCC's proposed approach.⁴⁰⁵
650. Chime submits that the allowance for Telstra's internal equivalent capital and operating costs is too high. Chime acknowledges that there could be greater

⁴⁰³ Telstra, *op cit*, p. 41.

⁴⁰⁴ Optus, above n 53, p. 19.

⁴⁰⁵ PowerTel and Request, above n 53, p. 32.

complexity in internal line sharing, as there will be a need to interface with Telstra retail and Telstra wholesale ordering systems, but considers that it would not expect this to result in a build cost double that of the ULLS system.⁴⁰⁶ Primus makes equivalent submissions.⁴⁰⁷

651. In response, Telstra rejects Chime's and Primus' submissions on the basis that no evidence is adduced in support of their contentions. Telstra states that it has led evidence concerning its internal equivalent costs, and restates its contention that if there is insufficient evidence, the ACCC should investigate the matter further.⁴⁰⁸

ACCC's views

652. Telstra would incur equivalent costs to ULLS and LSS specific costs when it provisions a line or a line sharing for its own use. These costs relate to qualifying the line, processing requests, and arranging for exchange-based work necessary to establish the provision of voice and/or DSL on the line. The question is what allowance would be reasonable.
653. The ACCC considers that its proposed allowance is appropriate, having regard to the section 152CR(1) criteria and the ULLS pricing principles, and taking a conservative approach to estimating the efficient forward-looking level of these costs. The ACCC considers that this is preferable to the approaches advocated by Telstra and the access seekers, respectively, to increase or decrease the allowance.
654. In this regard, the ACCC's allowance is calculated so as to permit Telstra to build two additional ordering and provisioning systems, of the same type and functionality that Telstra built for the ULLS, to process Telstra retail and Telstra wholesale orders for internal line sharing and perform associated tasks.
655. The ACCC considers that this allowance would tend towards overstating the efficient forward-looking cost of systems that provide the functionality necessary to establish internal line sharing. Should the costs of implementing the same functionality for internal line sharing, as provided by the ULLS system in respect of service qualification and provisioning, was more than double the actual costs that Telstra incurred in developing the ULLS system, those costs would not be efficiently incurred. Further, this assumes that the actual amount that Telstra spent in developing this functionality for ULLS was at an efficient level, such that it could be used as an efficient benchmark for equivalent functionality concerning internal line sharing.
656. The 'ADSL costs' that are claimed by Telstra are not the internal equivalent costs of line sharing. ADSL is the supply of a managed service over a shared line. The LSS and ULLS are services of a lower layer involving access to spectrum on copper wire. Different cost categories and elements are associated with 'unbundled' line sharing,

⁴⁰⁶ Chime, above n 204, p. 7.

⁴⁰⁷ Primus, above n 206, p. 7.

⁴⁰⁸ Telstra, above n 44, p. 19.

and managed services.

657. Telstra has previously accepted that ADSL costs are not the same as the relevant internal equivalent costs in proceedings before the Tribunal.⁴⁰⁹
658. Nor does the ACCC accept Telstra's claim that the cost of downstream ADSL services would be close to that of providing internal access or internal line sharing, given the additional technical and operational complexity of converting access to spectrum on a copper wire into an end-to-end voice and/or ADSL service.
659. Further support for this view is provided from the terms of the xDSL profit and loss statement on which Telstra relies, which indicates that the retail xDSL capital expenditure data is inclusive of network expenditure, in addition to systems development. This, together with the additional functions that are required of retail systems, can be expected to explain the significant variation between reported retail ADSL and wholesale ADSL capital expenditure.
660. That said, the ACCC does not consider that it is appropriate to reduce the capital allowance for internal line sharing as the access seekers propose. Doing so would run the risk that the allowance may prove insufficient to recover efficient forward-looking costs, and at a practical level, it is unclear what lesser allowance than that proposed would still ensure that efficient costs were recovered.
661. The ACCC notes Telstra's submission that the ACCC should further investigate this issue before making this determination. However, the ACCC considers that the available information is sufficient for it to form a view on the costs that would be efficiently incurred in the provisioning of internal line sharing, and that the ACCC should proceed to make the final determination on the basis advised to the parties in the June 2007 consultation paper.
662. Further, the ACCC notes that Telstra was invited in this arbitration hearing to provide a submission on its internal equivalent costs (as distinct to its downstream costs) should it wish to do so, but did not make such a submission.

Consideration against subsection 152CR(1) criteria

Paragraph 152CR(1)(a)

663. In terms of applying the subsection 152CR(1) criteria, the first criterion concerns the LTIE. (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).

⁴⁰⁹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [399].

664. As discussed previously, the ACCC considers that access charges that represent the forward-looking costs of an efficient provider best promote competition. This is because over the long run they lead to conditions which allow the access provider and access seekers to compete in downstream markets on their relative merits. The ACCC considers that its option is more consistent with this outcome than the parties' respective approaches, and so would better promote competition.
665. Adopting the approach Telstra implies would require LSS and ULLS-based service providers to contribute to the capital costs of Telstra's supply of competing higher layer, managed services. This outcome would lessen competition.
666. The ACCC does not consider that this decision affects the objective of achieving any-to-any connectivity, or that the matters identified in paragraph 152AB(6)(a) are relevant.
667. The ACCC considers that its approach satisfies Telstra's legitimate commercial or business interests, including its interest in recovering its direct costs and exploiting economies of scale and scope. This is because an allowance is made for Telstra's capital and operating costs when supplying the ULLS or line sharing to itself or access seekers.
668. Hence, Telstra will be able to recover its costs, including a normal return on investment, from its supply of LSS, ULLS and wholesale and retail services downstream from internal line-sharing. An additional allowance for ADSL level costs is not necessary in LSS and ULLS charges, as Telstra will be able to recover these costs in ADSL charges. Similarly, access seekers will be required to meet their ADSL level costs from their charges for ADSL services.
669. Further, by adopting an approach that promotes competition and dynamic efficiencies, demand for ADSL and voice services, and cost savings, will be encouraged, and this will further drive economies of scale and scope, given the present of fixed costs. Telstra will remain able to generate economies of scale and scope over all stages of production involved in supplying services to end-users. In this regard, the ACCC's approach will promote competition and dynamic efficiencies, which in turn will stimulate demand for downstream services.
670. Further, in respect of operating costs, the ACCC assumes that unit costs will remain approximate to those estimated for the ULLS, when much greater demand is brought to account, when there seems the potential for economies of scale and scope. Telstra will be able to get the benefit of those economies of scale and scope under the ACCC's approach.
671. Adopting the ACCC's approach will promote incentives for investment in infrastructure, such as DSLAM/MSAN networks and ordering systems. There is the potential for the ACCC's approach to provide too great an allowance for capital costs, and this could reduce investment in DSLAM/MSAN networks and ordering systems. However, Telstra's approach would have a far greater detrimental effect on investment incentives, as it would further increase the capital allowance above the likely efficient level. The risks associated with investment are taken into account by

allowing for a risk-adjusted rate of return.

Paragraph 152CR(1)(b)

672. The next criterion is the legitimate business interests of the provider and its investment in facilities used to provide the ULLS (paragraph 152CR(1)(b)). This criterion is discussed as part of the first criterion. The ACCC considers that its approach is consistent with Telstra realising its legitimate business interests, such as recovering its costs of providing access and a normal, risk-adjusted return on its investment.

Paragraph 152CR(1)(c)

673. The next criterion is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The access seekers' interests lie in being able to compete on their relative merits. The ACCC considers its approach best meets this criterion, in the present circumstances where information is limited. Telstra's approach would necessarily lead to Telstra gaining a significant cost advantage over access seekers, as access seekers would be required to contribute to Telstra's costs of transforming line sharing into downstream services as well as funding their own transformation costs. This would be contrary to access seekers' interests.

Paragraph 152CR(1)(d)

674. The next criterion is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, to itself or others.
675. Under the ACCC approach, Telstra will be able to recover its costs of providing access to the ULLS, including a normal return on investment, from its supply of LSS, ULLS and the services that it supplies that use the ULLS or LSS as an input (wholesale and retail ADSL services).
676. The additional ADSL level costs that Telstra has claimed are not the direct costs of providing access to the ULLS, as they include additional expenditures incurred in supplying managed end-to-end ADSL services. Nor is an allowance for these additional ADSL level costs in ULLS charges necessary to allow their recovery. Telstra will be able to recover these costs in ADSL charges. Similarly, access seekers will be required to recover their ADSL level costs from their charges for ADSL services.

Paragraphs 152CR(1)(e) & (f)

677. The cost of extensions to Telstra's ordering systems necessary to supply the LSS or ULLS have been taken into account.⁴¹⁰ The ACCC does not consider that the 'operational and technical requirements' matter materially contributes to this

⁴¹⁰ Subsection 152CR(1)(e) of the TPA.

decision.

Paragraph 152CR(1)(g)

678. The ACCC has considered which approach should be favoured in terms of enabling a carriage service, telecommunications network or facility to be operated efficiently.⁴¹¹ The criterion calls for consideration to be given, in this instance, to services, networks and facilities associated with the ULLS, LSS and downstream DSL services, of the access provider, the access seeker, and any other downstream service providers. The ACCC considers that its proposed approach strikes the best balance. It will lead to conditions that make competition in downstream DSL services more likely, which will in turn encourage efficiencies in markets for those services.
679. Turning to the ULLS pricing principles, the principles expressly require that Telstra's internal equivalent costs should be considered. The ACCC's proposed approach is consistent with this. Telstra's approach is contrary to these principles, as it seeks to incorporate a broader cost base.

Demand measures

Introduction

680. The ACCC proposed to adopt the demand measures that Telstra provided in prior regulatory proceedings which were compiled in around August 2006.⁴¹² The ACCC proposed to source ADSL demand for 2000-01 to 2004-05 from the ACCC's Snapshot of Broadband Deployment.⁴¹³ The ACCC sought the parties' views in its June 2007 consultation paper.⁴¹⁴

Submissions from parties

681. Telstra submits that the most up-to-date demand data should be used, and supplies more recent demand data (actual and forecast) for the LSS and ULLS.⁴¹⁵ Slightly higher demand for LSS is reported; while demand is revised down for ULLS. These data were compiled between December 2006 and February 2007. Revised data for ADSL services are not supplied.
682. Telstra considers use of most up to date data is consistent with the subsection 152CR(1) criteria, as use of earlier data would send incorrect price signals to access seekers, hinder Telstra in recovering its costs, would allow access seekers an artificial advantage and would inhibit the efficient supply of the ULLS and downstream

⁴¹¹ Subsection 152CR(1)(g) of the TPA.

⁴¹² These were contained in the *Statement of Andrew Harvey Briggs*, 11 August 2006.

⁴¹³ ACCC, Snapshot of Broadband Deployment as at 30 June 2005

⁴¹⁴ ACCC, *Draft Final Determination Consultation Paper*, 28 June 2007.

⁴¹⁵ Telstra, above n 7, p. 47; *Statement of Peter John Car*, 3 May 2007.

services.⁴¹⁶ Optus submits that the revised data presented by Telstra is not realistic and underestimate the likely demand for ULLS.⁴¹⁷

683. PowerTel and Request consider that the use of ex ante estimates of demand for future periods is the proper approach.⁴¹⁸
684. Chime suggests using ABS data for early period ADSL demand.⁴¹⁹ Primus makes equivalent submissions.⁴²⁰
685. Telstra objects to basing early period demand for ADSL on ABS data.⁴²¹

ACCC's views

686. Adopting Telstra's revised demand data would tend towards a slightly higher access charge, as a fixed capital cost would be spread over lesser demand. However, adopting these data would only increase the capital unit cost marginally – in the order of 3 cents. This effect would largely be accounted for in the rounding of ULLS charges adopted by the ACCC. As the operating costs are largely variable, adopting Telstra's revised demand data would not be expected to influence unit operating costs. Similarly, adopting Primus and Chime's suggested approach of sourcing early ADSL demand data from ABS publications would be unlikely to change the rounded charge.
687. Consistent with its general approach to use ex ante TSLRIC+ modelling, the ACCC considers that the earlier compiled demand data should be used in preference to Telstra's more recent data. Here, the earlier compiled demand data are more complete than this alternative data set, as they contain DSL demand data. Demand data for DSL, LSS and ULLS are required to calculate the TSLRIC+ measure.
688. Importantly, Telstra's earlier compiled data were prepared at the same time as the corresponding cost data that has been used, and so there is consistency between the entire data set that has been used to derive the TSLRIC+ measure. That is, Telstra has previously calculated and provided the operating cost associated with the earlier compiled demand data. If the more recent demand data were to be adopted, these cost data would need to be revised accordingly.
689. The parties have not claimed that the methods used to prepare the earlier data set were flawed, and no such errors are apparent to the ACCC. The ACCC does not agree that using Telstra's own ex ante forecast data is contrary to Telstra's legitimate interests, or compromises its ability to recover its costs. Provided that Telstra is able, on

⁴¹⁶ Telstra, above n 7, p. 48.

⁴¹⁷ Optus, above n 198, p. 26.

⁴¹⁸ PowerTel and Request, above n 53, p. 31.

⁴¹⁹ Chime, above n 53, p. 6.

⁴²⁰ Primus, above n 206, pp. 6-7.

⁴²¹ Telstra, above n 44, p. 21.

average, to prepare unbiased forecasts, it will recover its costs regardless of the approach taken. For similar reasons, the ACCC does not consider that using ex ante forecasts would lead to access seekers obtaining an artificial advantage.

690. The earlier compiled demand data are also more consistent with the data that would have been available when the parties were negotiating ULLS monthly charges. This is because these data were prepared more proximate to the time of the negotiations. As it would be expected in a competitive market that the parties would have been able to agree on a price for access proximate to these negotiations, and the price would have been arrived at having regard to forecast data then to hand, use of forecast data is more likely to result in access charges that would have been agreed in a competitive market. This in turn will promote efficiency.
691. The ACCC has decided not to use the ABS data in this instance, as the dates at which the measures were made do not align with the other observation dates that have been used. Using ABS data, which is a more complete data set, would slightly reduce the costs charged.
692. A full analysis of the differences in approach against the section 152CR(1) criteria or the ULLS pricing principles is not provided here, as adopting one or other approach would not lead to a material change in the ULLS monthly charge in this instance.

Proposed specific cost model

Introduction

693. The ACCC provided to the parties with its consultation paper a cost model that implemented its preliminary views. The structure of the cost model generally reflects the discrete cost models that Telstra has developed in previous regulatory proceedings for (i) 'LSS-specific costs', and (ii) 'ULLS-specific costs; but combines data from the two. The ACCC sought the parties' views on use of this cost model in its consultation paper.

Submissions from parties

694. In addition to submissions already discussed above, Telstra submits that the ACCC should adjust its modelling to restate the capital values each year.⁴²² It submits that the ACCC's proposed approach is inconsistent with modelling the costs of a new entrant and the ACCC's approach to network costs.
695. PowerTel and Request support the ACCC's model and submit that the results of the model are conservative.⁴²³

ACCC's views

⁴²² Telstra, above n 46, p. 41.

⁴²³ PowerTel and Request, above n 53, p. 32.

696. The ACCC has considered the parties' submissions and remains of the view that it should use the cost model that it circulated to the parties.
697. A cost model is a tool to convert assumptions and input values to a cost measure. The cost model structure proposed by the ACCC for specific costs works, is relatively well understood, and is transparent and flexible. It adopts the structure and formulae and same level of detail that Telstra developed in submitting TSLRIC+ models to the ACCC for consideration in prior regulatory proceedings, and which have subsequently been scrutinised during regulatory proceedings before the ACCC and the Tribunal.⁴²⁴
698. In contrast, Telstra's alternative cost model adopts a model structure with less detail and transparency over input data and intermediate calculations. Telstra's model does not allow separate estimation of specific and network costs. The result is that Telstra's newly developed model cannot be readily modified to adopt other modelling approaches, including the approach which the ACCC advised the parties it was likely to adopt in these proceedings. The ACCC has reached the view that it should proceed to calculate the TSLRIC+ of the ULLS 'specific costs' in accordance with the approach outlined to the parties. As explained above, the ACCC has reached this view after considering the parties' submissions and the section 152CR matters and the ULLS pricing principles.
699. Nor can Telstra's cost model be readily adapted to reflect this approach. This would require the introduction of additional data, and additional formula, which would essentially result in a new model. The development of this third model is unnecessary in these proceedings, as the model that the ACCC distributed to the parties is already configured in a way that allows the implementation of the approach that the ACCC has chosen to adopt.
700. While no party suggests that the model the ACCC proposed is incapable of deriving a proper measure of TSLRIC+, Telstra suggests an amendment to restate capital values for each year in the model. Telstra considers that would be more consistent with network cost estimates.
701. The ACCC has considered Telstra's submission, but does not consider that it is reasonably open to it to adopt Telstra's approach. Restating the capital base at the commencement of each regulatory period can assist in sending correct build-buy signals. However, in this instance, the ACCC's approach to levelisation of specific costs means there is a single regulatory period being considered, and it is therefore not appropriate or necessary to restate the capital values each year within that regulatory period. The levelisation approach allows Telstra to recover its costs over the regulatory period used. The ACCC does not consider that it is inconsistent to use this approach for specific costs as opposed to the approach for network costs. The ACCC also considers that in any case build-buy decisions are of more limited relevance to the assets constituting specific costs than to the assets constituting

⁴²⁴ ACCC above n 35, Appendix E; *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007)

network costs.

Overall conclusions on specific costs

702. In assessing particular modelling assumptions the ACCC has had regard consideration to the matters listed in section 152CR. The ACCC's view is that proper consideration of these matters is best achieved by taking into account whether cost assumptions and inputs better lead to an estimate of the efficient specific costs of the ULLS. In reaching its above conclusions, the ACCC considers that assumptions and inputs resulting in efficient specific costs will:
- better promote the LTIE, as they will better promote competition and encourage the economically efficient use of and investment in infrastructure. The ACCC considers that efficient cost-reflective prices will allow access seekers and Telstra to compete on the basis of their relative efficiencies.
 - allow Telstra to recover amounts necessary to protect its legitimate business interests, but not more than necessary. The ACCC also considers that efficient cost-reflective prices will allow Telstra to exploit the economies of scale and scope in all products.
 - allow access seekers to compete on their merits
 - reflect the direct costs of providing the ULLS and allow Telstra to recover those direct costs
 - account for the value to a party of extensions or enhancement of capacity of the systems that has been incurred by Telstra
 - allow the recovery of sufficient costs to ensure the safe and reliable operation of the network.
703. The ACCC further considers that an efficient forward-looking specific cost will better lead to costs which match the TSLRIC+ pricing set out in the ULLS pricing principles. The ACCC has noted above that certain assumptions and conclusions do not have a material effect on specific costs.
704. Telstra submits that adopting all of its preferences will result in a measure of specific costs of \$[c-i-c] per ULLS per month. This reflects Telstra's position on matters including allocation, restating of the asset base, flat annuities, updated demand, and indirect capital costs (although as noted, certain of these issues do not have a material effect on specific costs). These issues of principle have been discussed in detail earlier in this statement of reasons.
705. Adopting the access seekers' position would result in a lower measure. Chime and Primus have advocated a monthly specific cost of around \$2.27, which largely flows from reducing the allowance for Telstra's internal equivalent capital employed. Access seekers have made other submissions, as noted above, which might also reduce costs, although they have not quantified all those changes to costs. adopting an

all-lines allocation would lead to a specific cost measure of around \$2 per month.

706. Adopting a mix of Telstra's contentions and those advanced by access seekers would result in an ULLS specific cost within the range of \$2 to \$[c-i-c] per service per month.
707. The ACCC considers that the overall cost measure that results from its approach is appropriate having regard to the subsection 152CR(1) criteria and the ULLS pricing principles. This is because this measure results from adopting the approach on each of the material issues that the ACCC considers appropriate, having regard to those criteria and principles.
708. Further, the overall TSLRIC+ measure of specific costs, and hence the access charge, which results from the ACCC's proposed approach falls within the range of measures that could result from adopting the alternative approaches that have been advanced by the parties.
709. The ACCC's cost model provides separate levelised cost estimates for efficient unit operating costs (\$[c-i-c]) and efficient capital charges (\$[c-i-c]), totalling to \$2.45, consistent with the specific costs proposed to the parties in the ACCC's consultation paper.

4.1.11 Overall level of ULLS monthly costs

710. Given the ACCC's above conclusions on network costs and specific costs, the ACCC's view is that appropriate ULLS monthly cost estimates are as follows for the financial years 2005-06, 2006-07 and 2007-08:

Final determination ULLS cost estimates

Network costs

Band	2005-06	2006-07	2007-08
1	\$ 3.13	\$ 3.48	\$ 3.67
2	\$ 9.81	\$ 11.19	\$ 11.76
3	\$ 22.54	\$ 24.77	\$ 25.98

Specific costs

Band	2005-06	2006-07	2007-08
1	\$ 2.45	\$ 2.45	\$ 2.45
2	\$ 2.45	\$ 2.45	\$ 2.45
3	\$ 2.45	\$ 2.45	\$ 2.45

Total estimated ULLS monthly costs

Band	2005-06	2006-07	2007-08
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1	\$ 5.58	\$ 5.93	\$ 6.12
2	\$ 12.26	\$ 13.64	\$ 14.21
3	\$ 24.99	\$ 27.22	\$ 28.43

711. The ACCC has rounded the costs set out above up to the next 10 cents in order to obtain its ULLS monthly charges:

Final determination ULLS monthly charges

Band	2005-06	2006-07	2007-08
1	\$ 5.60	\$ 6.00	\$ 6.20
2	\$ 12.30	\$ 13.70	\$ 14.30
3	\$ 25.00	\$ 27.30	\$ 28.50

712. The ACCC notes that certain of the access seekers opposed the ACCC's rounding up of ULLS charges.⁴²⁵ The ACCC has continued to round cost estimates used to derive access charges, noting that this is its usual approach and recognises that it is appropriate to allow for a margin for error in conducting modelling of this nature.

713. As stated in its letter of 5 April 2007, the ACCC does not propose to set ULLS prices for Band 4. The ACCC has reached this view in light of the following factors:

- the fact that no access seeker has sought a determination of ULLS prices in Band 4
- the role of the Universal Service Obligation and other funding arrangements for the supply of services to Band 4
- the known technical limitations on the provision of xDSL services over the ULLS in regional and rural areas due to the length of copper loops, and the resulting small expected demand for the ULLS in Band 4
- the ACCC's concerns about the PIE II model's overestimation of network costs in regional and rural areas, and particularly in Band 4, as discussed earlier in these reasons.

714. Having considered the above factors, the ACCC's view is to not set prices for the ULLS in Band 4. The ACCC discusses the second and third of these points further below in relation to the structure of ULLS charges.

4.1.12 Structure of ULLS monthly charges

Introduction

715. As noted above at 4.1.1, the ACCC considers that there are effectively two broad issues in the consideration of ULLS monthly prices. The second of these is the

⁴²⁵ Chime, above n 204, p. 8; Primus, above n 206, p. 8.

appropriate structure of prices. In particular, the issue of geographic averaging of prices has been a point of significant debate since Telstra proposed a geographically averaged ULLS monthly charge in its submissions on its December 2005 undertaking.

716. Telstra submitted in support of its most recent set of undertakings that the price for the ULLS should be geographically averaged across Bands 1, 2, 3 and 4.⁴²⁶ Telstra based this submission on a government retail pricing parity obligation (RPPO) and submitted that the effect of this obligation meant that it could not charge deaveraged ULLS prices.⁴²⁷ The ACCC considered that it was not satisfied that Telstra's proposed geographically ULLS charges were reasonable.⁴²⁸ The ACCC's view was that, in particular, averaged pricing would adversely affect competition and distort usage and investment decisions.
717. The Tribunal devoted a significant part of its decision on Telstra's ULLS undertakings to the issue of geographic averaging. The Tribunal's main findings were that averaging:⁴²⁹
- is not likely to achieve the promotion of competition
 - is not likely to achieve the objective of encouraging the economically efficient use of infrastructure or encouraging economically efficient investment in infrastructure by access seekers
 - may, in principle, achieve the objective of encouraging economically efficient investment by Telstra
 - is likely to ensure Telstra's legitimate business interests, provided the Universal Service Fund does not fully recover losses made by Telstra in providing retail line rental services in rural areas (significantly, the Tribunal was not satisfied that the Universal Service Fund did not fully compensate Telstra for any losses made by Telstra in providing retail line rental services in rural areas)
 - is not in the interests of access seekers.
 - should not, of itself, lead to the recovery of more than direct costs.
718. The Tribunal concluded that it could not be satisfied that Telstra's proposed averaged ULLS charges were reasonable.⁴³⁰

⁴²⁶ For example, Telstra, *Telstra's confidential response to the Commission's Draft Decision on Telstra's ULLS monthly charges undertakings dated 23 December 2005*, 7 August 2006, p. 27-35.

⁴²⁷ The effect of the RPPO is discussed at *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [63].

⁴²⁸ ACCC, above n 35, pp. 98-99.

⁴²⁹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [285] – [287].

719. The ACCC's preliminary view, informed by the Tribunal's conclusions, and as outlined in its consultation paper, was that it continued to believe that it would not be appropriate to geographically average ULLS charges. The ACCC had also taken a preliminary position that, due partly to the concerns it had about the PIE II model's overestimation of network costs in regional and rural areas, and particularly in Band 4, that it would not set a price in Band 4 for the ULLS.
720. In light of the conclusions in its ULLS pricing principles report, the ACCC also reviewed Telstra's RAF reports for 2006-07 to examine whether the accounts demonstrated that Telstra had a current ability to recover its line costs. The ACCC presented parties in its November 2007 supplementary consultation paper with a comparison of the revenues and costs that Telstra had reported for those services which use the Telstra CAN as the access technology, and to which Telstra allocates line costs in its RAF reports.
721. The ACCC noted to the parties that on its review of the Telstra 2006-07 RAF returns, Telstra had reported revenues on these services in excess of allocated costs, including allocated CAN costs, and that the observed surpluses exceeded the small proportion of CAN cost that Telstra allocated to other RAF service classes. The ACCC suggested to the parties in the supplementary consultation paper that this indicated that Telstra was recovering its CAN costs and sought the parties views. The ACCC provided Telstra with the calculations that supported this analysis.

Submissions from parties

722. Access seekers' initial submissions did not address averaging in detail. Optus states it supports the ACCC's position to charge geographically de-averaged ULLS prices, based on the views of the Tribunal.⁴³¹ PowerTel/Request also agree that prices should not be geographically averaged, and cite a MJA report that discusses the effects of averaging on promotion of competition and on efficiency.⁴³² Chime states that it agrees with the views of the ACCC and the Tribunal that geographic averaging would adversely affect competition and distort usage and investment decisions.⁴³³ Primus makes equivalent submissions.⁴³⁴
723. Telstra in its initial submission submits that the ACCC is following "an isolationist agenda to deaverage urban and rural prices in Australia".⁴³⁵ Telstra submits that deaveraged prices conflict with government policy and international experience. It submits that the ACCC's approach will force higher prices in rural areas.
724. Telstra submits that it is in favour of either averaging or a high cost surcharge, given

⁴³⁰ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [291].

⁴³¹ Optus, above n 53, p. 21.

⁴³² PowerTel, above n 53, p. 32.

⁴³³ Chime, above n 53, p. 8.

⁴³⁴ Primus, above n 206, p. 8.

⁴³⁵ Telstra, above n, 37p. 7.

Telstra's retail parity pricing obligations and the ACCC's pricing for wholesale line rental.⁴³⁶ It submits that the costs incurred in rural areas are crucial to setting the prices in the other three Bands. Telstra submits that either an averaged price could be obtained directly from the Telstra CCA-based model discussed above or through direct estimates of Band 4 prices using either the PIE II model, extrapolation of prices from Band 3 or a Productivity Commission cost model.⁴³⁷

725. Telstra submits that there are constraints on Telstra which require it to charge a uniform price for line rental across the country.⁴³⁸ It presented analysis which it submitted demonstrated that significant under-recovery would occur in Band 4 areas as a result of both the RPPO and the ACCC's averaged wholesale line rental (WLR) prices.⁴³⁹ Telstra also submits that the Universal Service Fund (USF) is not sufficient to recover that potential under-recovery.⁴⁴⁰
726. Telstra submits that averaged prices promote competition.⁴⁴¹ It submits that if ULLS prices were deaveraged then access seekers could reduce the price of line rental services in urban areas below the average uniform price that Telstra must charge. It submits that if Telstra responded by reducing its own line rental charges, it would be unable to increase its price of line rental services in rural areas because access seekers would undercut it through the use of the WLR. Telstra submits that, in contrast, averaged prices would mean that access seekers using ULLS in urban areas and ULLS/WLR in rural areas recover the same average costs in all areas.
727. Telstra also submits that averaged ULLS prices open the door for ULLS-based competition in rural areas.⁴⁴² Telstra submits that technical barriers to use of the ULLS in rural areas are limited and that there is significant potential for competition in rural areas.
728. Telstra disagrees with the Tribunal's view that Telstra's above normal profits from other services supplied over the CAN might be able to be used to set prices for line rental in urban areas below that of an access seeker using ULLS in urban areas.⁴⁴³ Telstra dismisses this concern for a number of reasons, namely:⁴⁴⁴
 - its operational separation obligations
 - the ability of access seekers to obtain access to other services

⁴³⁶ Telstra, above n 46, p. 1.

⁴³⁷ Telstra, *op cit*, pp. 1-2, Annexure 2, p. 8.

⁴³⁸ Telstra, *op cit*, p. 3.

⁴³⁹ Telstra, *op cit*, Annexure 1.

⁴⁴⁰ Telstra, *op cit*, Annexure 3.

⁴⁴¹ Telstra, *op cit*, p. 2.

⁴⁴² Telstra, *op cit*, p. 5.

⁴⁴³ Telstra, *op cit*, p. 6.

⁴⁴⁴ Telstra, *op cit*, pp. 6-7.

- it is inappropriate to consider profitability of services
- it would not be possible to calculate profitability ex post.

729. Telstra also points to analyst reports that say access seekers could well compete at a ULLS price of \$30.⁴⁴⁵
730. Telstra also submits that averaging encourages the economically efficient use of and investment in infrastructure. It submits that if averaging is designed to recover no more than the overall costs of infrastructure, operating costs and a return on capital, then averaging will achieve economically efficient use of and investment in infrastructure. It submits that the Tribunal was incorrect to assume that averaging would cause allocative efficiency losses.⁴⁴⁶ Telstra submits that averaging would not be likely to lead to allocative efficiency losses as WLR, wholesale ADSL and LSS are already geographically averaged and already generate allocative inefficiencies.
731. Telstra also submits that the Tribunal's conclusion that averaging will be unlikely to promote productive and dynamic efficiency is also wrong, as averaging will promote competition and therefore produce such efficiencies. It submits that dynamic efficiency would not be met without averaging, as Telstra would not be able to ensure a reasonable return on its assets in rural areas, at least not in the medium to long term.
732. Telstra submits that the possibility of inefficient bypass in urban areas under averaged ULLS prices is small in any case and that Telstra could commercially agree prices with access seekers to avoid inefficient bypass.⁴⁴⁷ It submits that there would be a much higher risk of inefficient entry under deaveraged prices. Telstra submits that deaveraged prices would generate an artificial cost advantage for access seekers, that price falls would be rapid and that Telstra would suffer severe revenue consequences as a result.⁴⁴⁸
733. Telstra submits that it is inappropriate to consider WiMax services for supply in rural areas, as it submits that WiMax cannot supply voice, and VoIP cannot be considered a substitute.⁴⁴⁹
734. Telstra submits that, to the extent averaging may distort consumption choices, these distortions are already in place in light of the RPPO and of WLR pricing. Telstra submits that such distortions already existing need to be taken into account.
735. Telstra also submits that it is in its legitimate commercial interests to implement averaged prices in light of Government policy.⁴⁵⁰ Telstra also submits that the fact

⁴⁴⁵ Telstra, *op cit*, pp. 7-8.

⁴⁴⁶ Telstra, *op cit*, p. 9.

⁴⁴⁷ Telstra, *op cit*, p. 10.

⁴⁴⁸ Telstra, *op cit*, p. 10.

⁴⁴⁹ Telstra, *op cit*, p. 11.

⁴⁵⁰ Ibid.

that the Government is conducting a review of the USO does not affect the ACCC's duty to enquire into and fully examine this issue, given any changes to the USF are unlikely to be implemented prior to 30 June 2008.⁴⁵¹

736. Telstra notes that, with respect to its legitimate commercial interests, the Tribunal concluded that averaging would not allow Telstra to over-recover its costs so long as the USF does not fully compensate Telstra for any losses it may incur.⁴⁵² Telstra refers to analysis that demonstrates it is not compensated for this under-recovery.⁴⁵³
737. Further on this issue, Telstra submits that the Tribunal's decision should not lead the ACCC to set deaveraged prices as there is evidence in this dispute that "clearly shows that the USF does not fully compensate Telstra" and that the ACCC's role in this arbitration can be clearly distinguished from its (and the Tribunal's) role in the undertaking context.⁴⁵⁴
738. Telstra submits that paragraph 152CR(1)(c) refers to all persons and not just access seekers, and submits that end users interests must also be taken into account.⁴⁵⁵ It further submits that the Tribunal was wrong in considering that averaging would not be in the interests of access seekers. Telstra submits that an increase in urban prices would not be against access seekers' interests to the extent that they can still compete equally with Telstra. It also submits that the Tribunal's consideration to access seekers' investments is not consistent with the legislative criteria, and that the analysis was not complete.
739. Telstra contends that averaged prices better reflect the full direct cost of both production and the limits the RPPO places on Telstra's costs.⁴⁵⁶ Telstra also contends that averaging is consistent with the operational and technical requirements necessary for the safe and reliable operation of the CAN.⁴⁵⁷ It submits that considerations under paragraph 152CR(1)(g) are the same as those under paragraphs 152CR(1)(a) and 152AB(2)(c).
740. Telstra submits that the ACCC should have regard to the RPPO and to international precedent. In particular it points to a paper by the OECD and to an ACCC decision in reference to water, where postage stamp pricing was adopted.⁴⁵⁸
741. In respect of the OECD paper, Telstra rejects the ACCC's interpretation of the paper in the ULLS pricing principles. Telstra contends that "(t)he extract clearly states that the structure of access charges should reflect the structure of end-user charges, and

⁴⁵¹ Telstra, above n 20, p. 7.

⁴⁵² Telstra, above n 46, p. 12.

⁴⁵³ Telstra, *op cit*, Annexure 3.

⁴⁵⁴ Telstra, above n 20, p. 7.

⁴⁵⁵ Telstra, above n 46, p. 15.

⁴⁵⁶ Telstra, *op cit*, p. 16.

⁴⁵⁷ Ibid.

⁴⁵⁸ Telstra, *op cit*, p. 17.

that if the regulator wishes to preserve the geographically averaged structure of end-user prices it is “essential” to geographically average ULLS”. Telstra further submits that the paper “does not say that prices should not be averaged because inefficient bypass can occur” but notes “that it is not desirable to regulate entry due to the fact that it is impossible to determine which parts of the local loop network are natural monopolies”. Telstra submits that the implication drawn by the ACCC is therefore nonsensical and would render the entirety of the first paragraph of the extract nugatory.⁴⁵⁹

742. Telstra also later presented the ACCC with examples from US jurisdictions that it submit support Telstra’s position that an averaged price is preferable under the legislative criteria.⁴⁶⁰
743. Telstra also submits that, if the ACCC did not enact an averaged ULLS price, it should calculate a high cost surcharge to be added to the ULLS prices in Bands 1, 2 and 3.⁴⁶¹ Telstra states that a high cost surcharge would promote competition as it would ensure competitive neutrality and not allow access seekers to undercut Telstra in both urban and rural areas. It also submits that a high-cost surcharge would open the possibility of ULLS-based competition in rural areas.⁴⁶²
744. Telstra acknowledges that a high-cost surcharge may lead to some inefficient bypass but submits that Telstra would be likely to enter commercial negotiations to reduce inefficient bypass.⁴⁶³ As with averaging, Telstra submits that any inefficiency would in any case be smaller than the inefficiency stemming from deaveraged prices without a surcharge. Telstra also submits that, for reasons set out in reference to averaging, a high cost surcharge would more appropriately meet the matters in section 152CR.
745. Optus submits in its response submission that, at a broad level, the main question is whether losses or potential losses in rural areas are relevant to pricing access in urban areas.⁴⁶⁴ Optus submits that the fundamental question is therefore whether the RPPO and WLR imposes a cost on Telstra, and that if the answer is no, claims about averaging can be dismissed. Optus submits that there is no evidence of any losses being imposed on Telstra by retail and wholesale pricing parity obligations.
746. Optus submits that Telstra actually over-recovers in Band 4 areas, as it states that Telstra’s analysis:⁴⁶⁵

⁴⁵⁹ Telstra, above n 20, p. 8.

⁴⁶⁰ Telstra, *Telecommunications Access Dispute between Chime Communications Pty Ltd, Optus Networks Pty Limited, XYZed Pty Limited, Primus Telecommunications Pty Ltd, PowerTel Ltd, Request Broadband Pty Ltd, Macquarie Telecom Pty Limited and Telstra Corporation Limited (Telstra) regarding Unconditioned Local Loop Service (ULLS)*, 31 October 2007.

⁴⁶¹ Telstra, above n 46, p. 18.

⁴⁶² Ibid.

⁴⁶³ Telstra, *op cit*, p. 19.

⁴⁶⁴ Optus, above n 198, p. 2.

⁴⁶⁵ Optus, *op cit*, Annexure A.

- overestimates rural costs, as its PIE II model and alternative cost estimates are unreliable, and that the proper forward-looking cost of rural areas should be determined by reference to WiMax
 - underestimates rural revenues, as line rentals should be higher, other profits should be taken into account and indirect benefits should also be considered
 - underestimates the allowance for the USO, as it uses an incorrect technology mix.
747. Optus also submits that reasons put forward by Telstra for the supposed inadequacy of the USO are incorrect.
748. Optus submits that averaged ULLS prices will not promote competition. In making that submission, it submits that Telstra can recover its costs if prices are deaveraged, that ‘cream-skimming’ is not realistic, that some competition in rural areas is possible but limited, that it is appropriate to consider profitability and that Telstra has considerable excess profits on other services, that WLR in rural areas does not prevent Telstra from competing (especially in the short run) and that access seekers margins are not as high as submitted.⁴⁶⁶
749. Optus also submits there is a genuine risk of inefficient urban bypass under averaged ULLS prices and that Telstra would be unlikely to negotiate commercial agreements to avoid inefficient bypass.⁴⁶⁷ It also submits that Telstra is able to recover enough to meet its legitimate commercial interests.⁴⁶⁸ Optus further submits that, in considering the interests of access seekers, regard should be had to the asset life of DSLAMs as compared to the CAN.
750. Finally, Optus rejects Telstra’s reference to the OECD paper, and submits that a high cost surcharge should be rejected for the same reasons as averaging should be rejected.⁴⁶⁹
751. Optus further submits that the analysis put forward by the ACCC from Telstra’s RAF reports prove conclusively “the falsehood of Telstra’s repeated claims that a combination of geographically de-averaged ULLS prices and the retail pricing parity obligation will lead to a situation where it is unable to recover the costs of the CAN”. Optus submits that this is consistent with analysis Optus has previously presented to the ACCC which demonstrates that Telstra earns supra-normal profits and does not incur losses for the provision of services in rural areas.⁴⁷⁰

⁴⁶⁶ Optus, *op cit*, pp. 3-10.

⁴⁶⁷ Optus, *op cit*, p. 10.

⁴⁶⁸ Optus, *op cit*, p. 12.

⁴⁶⁹ Optus, *op cit*, p. 14.

⁴⁷⁰ Optus, above n 25, p. 3.

752. PowerTel/Request in their reply submission generally adopt the views of the Tribunal on the issue of averaging.⁴⁷¹ PowerTel/Request also contend that there is no risk of cream-skimming.⁴⁷² They state that the RPPO is not relevant to ULLS prices and that the RPPO explicitly is drafted to allow Telstra to respond to new pricing packages or to respond to competition.⁴⁷³ They reject the alternative option of a high-cost surcharge.⁴⁷⁴
753. Chime contends that the appropriate forum to address any potential inadequacy in the USO is the appropriate forum of the current USO review.⁴⁷⁵ It submits that averaging is only one of many possible approaches that could deal with the issue of urban and rural pricing. Primus makes similar submissions.⁴⁷⁶ Macquarie submits that the access dispute is not the appropriate forum to address issues relating to the USO.⁴⁷⁷
754. In its third submission, Telstra rejects the access seekers' submissions with respect to averaging. In response to Optus, Telstra submits that Optus' analysis that Telstra overrecovers in Band 4 is inconsistent with other submissions it has made.⁴⁷⁸ Telstra also submits that the analysis is incorrect for a number of reasons, such as the use of WiMax costs, the use of EBITDA measures and other reasons.⁴⁷⁹ It also submits that it is incorrect to have regard to Telstra's profitability on other services.⁴⁸⁰ Telstra questions Optus' comments on the feasibility of competition in rural areas.⁴⁸¹
755. In response to Chime, Telstra submits that the current USO review is not relevant to the present proceedings, as no outcome of the review will be heard before 30 June 2008, the expiry of the final determination.⁴⁸² In response to PowerTel/Request, Telstra submits that PowerTel/Request misunderstand the purpose of the access regime in their submissions about averaging.
756. In relation to the ACCC's request for submissions on whether or not Telstra's RAF demonstrates that it is recovering its CAN costs in rural areas, Telstra submits that using HCA and CCA data is inconsistent with the ACCC's criticisms of using CCA data.
757. Telstra also submits that, as the ACCC includes revenue from voice and data traffic,

⁴⁷¹ PowerTel and Request, above n 174, p. 28.

⁴⁷² PowerTel and Request, *op cit*, p. 31.

⁴⁷³ PowerTel and Request, *op cit*, p. 34.

⁴⁷⁴ PowerTel and Request, *op cit*, p. 35.

⁴⁷⁵ Chime, above n 179, p. 1.

⁴⁷⁶ Primus, above n 180, p. 1.

⁴⁷⁷ Macquarie, above n 177, p. 2.

⁴⁷⁸ Telstra, above n 49, p. 5.

⁴⁷⁹ Telstra, *op cit*, p. 7.

⁴⁸⁰ Ibid.

⁴⁸¹ Telstra, *op cit*, p. 9.

⁴⁸² Telstra, *op cit*, p. 17

this would require all voice services supplied on the CAN to be priced such that they recover CAN costs regardless whether they are provided by Telstra or other providers. Telstra submits, though, that the ACCC does not allow Telstra to recover any CAN costs from voice or data services charged to access seekers. In this regard, Telstra notes CAN costs are not recovered by Telstra for PSTN OTA, LCS or LSS.⁴⁸³

758. Mirroring earlier submissions, Telstra submits that it is prevented from fully recovering CAN costs by the requirement for geographic deaveraging of ULLS prices, the availability of WLR to access seekers at geographically averaged prices and the inadequacy of the USF.⁴⁸⁴
759. Telstra submits this leaves only unrelated services or downstream retail voice and data services from which it can recover CAN costs. Telstra contends that recovering CAN costs from these services creates a material cost asymmetry between Telstra and its competitors that is contrary to the LTIE in two respects:
- it inhibits competition on the merits and
 - disincentivises investment in facilities that could be “appropriated” by access seekers at prices that do not include the common costs of those facilities.
760. Telstra submits that if only revenues from end-user access, local calls and ULLS are included, then total costs will exceed revenue, using either the HCA or the CCA approach.⁴⁸⁵
761. Telstra submits that the combined impact of deaveraged ULLS prices, the RPPO, averaged WLR prices and insufficient USF compensation would be that providers of retail voice and data services that do not have the obligation to provide rural ULLS would face a lower cost than Telstra for CAN-based inputs. Telstra states this would mean retail voice and data services supplied by Telstra would incur the full CAN costs and retail competition in these services would be distorted against Telstra.⁴⁸⁶
762. Chime and Primus each submit that Telstra’s RAF reports demonstrate that rather than suffering a loss, Telstra is recovering a significant profit from charges for services accessing the CAN. Further, Chime and Primus each submit that, given RAF reports are based on HCA or CCA data, it is likely the surplus would be greater than if the CAN costs were based upon a TSLRIC+ methodology. These parties submit that this contradicts Telstra’s claim that it incurs losses in supplying services to rural areas due to retail pricing parity and the claimed inadequacy of the USF. Chime and Primus submit that given Telstra is more than fully compensated for services accessing its CAN (regardless of the adequacy of the USF) it seems reasonable that Telstra’s submissions against de-averaging have been superseded by its own

⁴⁸³ Telstra, above n 20, p. 12.

⁴⁸⁴ Ibid.

⁴⁸⁵ Telstra, *op cit*, p. 13.

⁴⁸⁶ Ibid.

accounting data.⁴⁸⁷

763. Macquarie submits that it “strongly supports” the ACCC’s conclusions in its consultation papers and the ULLS pricing principles regarding the RAF reports and their relevance to geographic averaging of ULLS charges. Macquarie reiterates its strong support for the ACCC’s view that ULLS prices should be deaveraged and submits that as such, Telstra’s proposal of geographic averaging should be disregarded for the purposes of the final determination.⁴⁸⁸
764. PowerTel/Request cite the Tribunal decision that Telstra had not established that the USF does not adequately compensate it for losses in complying with the retailing pricing parity obligation in the provision of retail line rental services in rural areas. These parties submit that having regard to the Tribunal’s reasons and the material and observations of the ACCC in its supplementary consultation paper and the Final ULLS Pricing Principles Determination, the ACCC ought to disregard Telstra’s claims in relation to the relevance of Telstra’s RAF reports to the recovery of line costs and geographical averaging.

ACCC’s views

Introduction

765. The ACCC considered the parties’ extensive submissions made in regard to whether the ULLS price should be averaged for the period covered by this arbitration. For the reasons that follow, the ACCC considers that the ULLS price should not be geographically averaged for the period covered by this arbitration, having regard to the ULLS pricing principles and the subsection 152CR(1) matters.
766. This is consistent with the ACCC’s ULLS pricing principles, which state that the ULLS charges should be geographically de-averaged.⁴⁸⁹ The ACCC reached that view after a public inquiry and analysis of the relevant legislative matters in the TPA, in conjunction with the previous views of parties to the ACCC’s August 2006 undertaking decision and the Tribunal’s subsequent decision on the same undertaking.⁴⁹⁰ Those previous processes also inform the ACCC’s analysis below.
767. The ACCC noted at the time of making its ULLS pricing principles that a significant issue in the consideration of geographic averaging is the extent to which Telstra recovers sufficient money to compensate it for any losses it suffers as a result of the retail pricing obligation and any competition that materialises in urban areas. In particular, it is relevant to consider:

⁴⁸⁷ Chime, above n 25, pp. 2-3; Primus, above n 25, pp. 2-3.

⁴⁸⁸ Macquarie, above n 25, p. 3.

⁴⁸⁹ ACCC, above n 5, p. 22.

⁴⁹⁰ ACCC, above n 35, pp. 98-99; *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007).

- the extent to which factors such as the RPPO or WLR pricing constrain Telstra in its pricing and ability to recover costs
 - the extent to which the USF compensates Telstra for any losses.
768. Telstra noted in its submission to the pricing principles inquiry that, were it provided with adequate compensation from the USF, it would be appropriate that prices were de-averaged.⁴⁹¹
769. The Tribunal, in its decision on Telstra's undertaking, was not satisfied that the USF did not fully compensate Telstra for any losses made by Telstra in providing retail line rental services in rural areas.⁴⁹² However, Telstra has submitted to this arbitration information that it states supports its submissions that it incurs losses in rural areas.
770. As noted by Chime and Primus, the USO and the USF is currently the subject of a review by the Department of Communications, Information Technology and the Arts (now the Department of Broadband, Communications and the Digital Economy).⁴⁹³ The outcome of this review is still unknown but as noted by Telstra has significant implications for the issue of averaging. The ACCC notes Telstra's submission that the outcome of this review would likely be handed down after the expiry of the final determination.
771. Having regard to these views, the ACCC considers it relevant to consider the effect of the RPPO, Telstra's ability to recover its line costs and the adequacy of the USO in the arbitration.

Effect of RPPO, ability of Telstra to meet line costs and adequacy of the USO

772. The ACCC considers that, as they are inherent to any consideration of the issue of averaging, it is directly relevant to consider the effect of the RPPO (and the ACCC's current interim approach to WLR pricing), the ability of Telstra to meet its line costs and the adequacy of the USO. The issue of averaging only arises from a possible Telstra under-recovery due to a possible combination of deaveraged ULLS prices with:
- pricing constraints from the RPPO
 - increased urban competition, and
 - inadequacy of the USF.

⁴⁹¹ Telstra, *Telstra response to "Fixed Services Review: further consultation on draft ULLS pricing principles:" of October 2007*, November 2007.

⁴⁹² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [258].

⁴⁹³ DCITA, *Telecommunications Universal Service Obligation (USO) review issues paper*, August 2007.

773. Telstra submits that the effect of the RPPO is that it must average retail line rental prices.⁴⁹⁴ The RPPO does not formally apply to line rental services other than HomeLine and BusinessLine Part, and these two service offerings are a very small subset of Telstra's overall offerings. Notably, they only provide a line rental and local call service.
774. However, the ACCC notes the views of the Tribunal that the RPPO does "to some extent, constrain Telstra's pricing of bundled offerings that include the provision of line rental services".⁴⁹⁵ The ACCC considers that the point to which prices might be raised is uncertain. Accordingly, the ACCC considers that Telstra is only partly correct. The RPPO will provide some constraint on Telstra's other products, but the extent to which this is true is uncertain. The RPPO was specifically designed with the aim that "Telstra's ability to respond to competition or to introduce new pricing packages is only limited in relation to its basic line rental services".⁴⁹⁶
775. The ACCC has closely examined Telstra's analysis of the extent to which the RPPO and current WLR pricing arrangements might impact on cost recovery, due to customers shifting to other carriers using WLR if Telstra sought to increase its line rental services towards costs.⁴⁹⁷ Telstra's analysis attempts to quantify the extent of loss for three different factors—wholesale lines, HomeLine and BusinessLine customers and shifting retail customers. Telstra has based its analysis on three different Band 4 line costs – a cost proxied by WiMax prices, a cost from the ACCC's model prices and a Telstra estimate based on the PIE II model.
776. The ACCC considers firstly that Telstra's PIE II model based estimate at \$197 is unrealistic. Using more realistic inputs in its calculations of network costs above, the ACCC notes that it derived Band 4 network cost estimates from the PIE II model in the order of \$110-\$130. However the ACCC has significant concerns about the PIE II model's ability to estimate realistic costs for Band 4 given certain of its modelling assumptions, particularly related to model design.⁴⁹⁸ Accordingly the ACCC considers that this would be likely to overstate costs. The ACCC considers that it is more relevant to consider that costs would be likely to approach the lower of the three costs used by Telstra—the cost based on WiMax values. The ACCC does not consider that Telstra's extrapolation approach, or use of simple line density ratios, have sufficient sophistication to be relied upon as a cost estimate.⁴⁹⁹ These approaches do not give any consideration to the network that would be deployed.
777. Telstra has submitted that it is inappropriate to consider non-copper based technology when pricing the ULLS as the ULLS is inherently copper-based.⁵⁰⁰ The ACCC

⁴⁹⁴ Telstra, above n 46, p. 1, Annexure 1.

⁴⁹⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [224].

⁴⁹⁶ *Explanatory Statement, Telstra Carrier Charges – Price Control Arrangements, Notification and Disallowance Determination No. 1 of 2005 (Amendment No.1 of 2006)*, 27 Feb 2006.

⁴⁹⁷ Telstra, above n 46, p. 2, Annexure 1.

⁴⁹⁸ ACCC, above n 35, p. 96.

⁴⁹⁹ Telstra, above n 46, Annexure 2.

⁵⁰⁰ Telstra, *op cit*, p. 83, Annexure 13.

considers that this misconceives the reason for examining the cost of alternative technologies. In particular, alternative technologies are relevant not because they represent the price of copper deployment, but because they demonstrate whether forward-looking technology choices in a model are efficient. Similarly, Telstra submits that the ACCC should not have regard to WiMax as it may not have the necessary functionality to provide a comparable voice service.⁵⁰¹ The ACCC notes firstly that this position directly contradicts Telstra statements in other contexts about the competitive constraint provided by VoIP,⁵⁰² but in any case does not consider that it can or needs to make a definitive decision on the viability of WiMax.

778. The ACCC similarly notes that the exact elasticity of end-users and the extent to which they would transfer from Telstra's bundled services is unclear. Telstra has provided analysis that is based on cross-price elasticity of end-users ranging from -0.1 to -0.9.⁵⁰³ The ACCC has noted in the past that there may be significant inertia present in the market for fixed voice services.⁵⁰⁴ Accordingly the ACCC would expect that the relevant elasticity would tend towards the lower values.
779. Accordingly, the ACCC considers that the possible under-recovery by Telstra as a result of the RPPO and/or WLR would err towards the lower estimates in Telstra's analysis – in the order of \$[c-i-c] loss rather than the \$[c-i-c] or so that Telstra hypotheses could be its Band 4 losses.
780. Similarly, the ACCC has paid close regard to Telstra's estimates of the inadequacy of the USO.⁵⁰⁵ The ACCC notes that Telstra's analysis, premised on a loop cost of \$195.23, reaches the conclusion that its annual loss in Band 4 areas is \$[c-i-c] even after the USO is taken into account. Telstra submits that under-recovery will occur even if a \$52 estimate is used (in the order of \$[c-i-c] per annum).
781. The ACCC has also closely considered the submissions of Optus that Telstra over-recovers in Band 4.⁵⁰⁶ Optus submits that regard should be had to WiMax costs, that all revenues need to be taken into account and that the proportion of the USO that Telstra allocates to the CAN is inadequate. The ACCC notes Optus' submission but considers that, as submitted by Telstra, Optus' use of EBITDA margins may mean that the value of the analysis is limited.
782. The ACCC notes the following three points about the analysis presented by Telstra on the recovery of its costs:
 - the analysis relies on a 23 per cent allocation of costs from the USO

⁵⁰¹ Telstra, *op cit*, p. 11.

⁵⁰² See for example, Telstra, *Telstra's Local Carriage Service and Wholesale Line Rental Service exemption application,—supporting submissions*, July 2007, p. 26

⁵⁰³ Telstra, above n 46, p. 5, Annexure 1.

⁵⁰⁴ See for example, ACCC, *Local services review—final decision*, July 2006, p. 38.

⁵⁰⁵ Telstra, above n 46, Annexure 3.

⁵⁰⁶ Optus, above n 198, Appendix A.

- the analysis assumes that there are no profits to be contributed from urban areas to offset losses in rural areas
- the analysis ignores any profits on other services provided over the CAN

783. With respect to the appropriateness of using the 23 per cent allocation from the USO, the ACCC has noted in the past the difficulty of using this measure applied to other estimates of costs, as the technology mix in the model is quite specific.⁵⁰⁷

784. In relation to the absence of any allocation of line cost recovery from urban areas, the ACCC notes that in the theoretical long run it would be expected that competition from deaveraged ULLS prices in urban areas would lead to a situation where prices were competed to zero. Telstra's analyses on both the effect of the RPPO and the adequacy of the USF rely on this outcome occurring. The ACCC considers that, while this outcome might be expected in the long run, it would not be realistic to assume that this would occur in any near time frame nor within the period of the final determination. In particular, the ACCC notes that ULLS rollout is limited to date. Further, parties must deploy significant infrastructure to provide DSL and voice services and other barriers to entry may also limit the effectiveness of competition in urban areas. Accordingly, urban areas may provide some contribution to line costs. In that respect, the ACCC notes that the number of lines in urban areas significantly outweighs the number of rural lines.

785. However, the ACCC considers that the major problem with Telstra's analysis is that it ignores the profits available to Telstra from the provision of other services that utilise the CAN. The Tribunal has said that it is relevant to consider, for example, in assessing the effect of averaging on competition, "whether Telstra makes sufficient above normal profits from the provision of services over its CAN, other than line rental, to balance any losses it may make from the provision of below-cost retail line rental services."⁵⁰⁸ Telstra's analyses do not account for any profits that may be received from other services. The ACCC notes that Telstra submits that it is inappropriate to have regard to Telstra's profitability on other services.⁵⁰⁹ However the ACCC considers that, as the relevant consideration is whether Telstra is prevented from recovering its line costs across its network, it is directly relevant to consider whether Telstra can recover its line costs from other services. There is no requirement that Telstra can only recover its line costs from line rental services – Telstra can allocate such costs to, and recover those costs from the revenues for, any services provided over the CAN.

786. Accordingly, and as noted above, the ACCC examined Telstra's RAF accounts to examine whether Telstra was currently recovering its line costs across the whole of the services supplied over the CAN. The ACCC noted significant surpluses in both Telstra's HCA and CCA reports. The surpluses observed from Telstra's HCA reports indicate that Telstra is recovering its actual CAN costs (although the ACCC does not

⁵⁰⁷ ACCC, above n 35, p. 166.

⁵⁰⁸ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [114].

⁵⁰⁹ Telstra, above n 49, p. 7.

consider that actual CAN costs are as relevant as efficient costs). Significantly, the surplus in Telstra's CCA reports indicate that Telstra would continue to recover its CAN costs in the event that Telstra was required to rebuild its CAN today without optimising the current deployed network or design. This is because, as noted above, the ACCC considers that CCA data is likely to overstate efficient forward-looking TSLRIC+ costs of the network because of this lack of optimisation. The ACCC does not consider that it is inappropriate to use CCA RAF data for this purpose as the data provides an upper bound on likely efficient costs. The analysis also incorporated a WACC from Telstra's returns that the ACCC considers is higher than an appropriate WACC.

787. The ACCC considers that its analysis better considers CAN cost recovery than the analyses of either Telstra or Optus. As the CCA RAF accounts, for reasons of the inherent inefficiency of CCA data, will be based on costs higher than the TSLRIC+ of the CAN, the results of the analysis represent a conservative estimate of the surplus of revenues over line costs. The results from the analysis demonstrate that, once the full range of services is taken into account, Telstra is currently recovering its line costs. Furthermore, were a TSLRIC+ estimate of CAN costs to be included, the observed surplus would be higher than that reported in the RAF accounts.
788. Telstra also submits that it may not be able to recover or to continue to recover line costs from revenues earned on all services that are supplied over the CAN, and submits that the ACCC should only have regard to the ULLS, end-user basic access and local calls to assess line cost recovery.⁵¹⁰ It submits that the ACCC's analysis introduces a significant retail cost disadvantage compared to Telstra's rivals, as above average profits on certain services, that Telstra submits are not directly referable to the CAN, would be used to service CAN costs.⁵¹¹ However the ACCC notes that its analysis of Telstra's RAF figures examines the retail and wholesale services to which Telstra itself allocates CAN costs in its RAF accounts, and that all of the services examined clearly utilise the CAN. The ACCC also notes that Telstra has the ability to rebalance its basic access and other charges. Accordingly the ACCC considers that the services included in its analysis are appropriate, in light of the Tribunal's guidance that above normal profits on services supplied over the CAN are relevant.
789. Furthermore, the amount by which Telstra's CAN-based service revenues exceed costs is significant, and overall revenues are steady over time. Should Telstra consider that fixed voice and data services may not be able to continue to contribute sufficiently to the recovery of line costs, or that costs should be directly allocated to basic access alone, it would be open to Telstra to increase line rental charges so that a greater proportion of line costs are recovered from these charges alone. Doing so would provide greater assurance that any decline in voice and data revenues that could possibly occur would not impede its ability to recover efficient, forward-looking line costs, or would provide assurance that basic access was directly recovering line costs.

⁵¹⁰ Telstra, above n 20, p. 13.

⁵¹¹ Ibid.

790. The ACCC notes that Telstra is subject to retail price control arrangements on increasing its line rental charges (in addition to the RPPO on HomeLine and BusinessLine Part).⁵¹² Relevantly, under clause 13 of the arrangements, there is a cap on the average price for a basket of services including all line rental products and PSTN call products, and caps on Telstra's basic line rental products, HomeLine Part and BusinessLine Part.
791. The ACCC is of the view that these price control arrangements do not prevent Telstra from making material increases to its line rental charges. In this regard, the ACCC notes that the price cap over the basket that includes line rentals and PSTN calls does not prevent the rebalancing of line rental and call charges, and so provides no direct constraint on the level of line rental charges. Furthermore, the ACCC notes that:
- the CPI price cap that applies to the HomeLine Part product (on which WLR prices are based) was set at a \$5 per month premium above its then price, which has allowed it to be priced above most other residential line rentals, and this price can be increased in real terms until it 'catches up' with the cap
 - while there could be a degree of substitutability between the 'Part' products and other line rentals, it is unlikely that many customers on other line rentals would churn to the 'Part' products or to products using WLR unless the price of those other line rentals increased significantly. The HomeLine Part product was unpopular even when it was charged at a discount to other line rentals, and it has become slightly less popular since it has been priced at a premium to most other line rentals. Similarly, as noted above, there is considerable inertia in the market for fixed voice services.⁵¹³
792. In summary, the ACCC considers that Telstra is able to recover its CAN costs, and will continue to be able to recover these costs in the foreseeable future.
793. In light of the ACCC's conclusions about Telstra's ability to recover the costs of the CAN across both urban and rural areas, the ACCC now considers geographic averaging against the legislative matters in section 152CR.

Consideration of averaging against the subsection 152CR(1) criteria

794. The first aspect of promoting the LTIE under paragraph 152CR(1)(a) of the TPA is to have regard to the promotion of competition.
795. In its decision on Telstra's averaged ULLS monthly charge undertaking, the Tribunal considered that it could not be satisfied that averaging of ULLS charges would be

⁵¹² *Telstra Carrier Charges - Price Control Arrangements, Notification and Disallowance Determination No 1 of 2005* as amended

⁵¹³ See for example, ACCC, *Local services review—final decision*, July 2006, p. 38.

likely to achieve the promotion of competition.⁵¹⁴ More specifically, the Tribunal considered that:

- averaging would be likely to neither promote nor prevent equally efficient access seekers from competing with Telstra in urban areas
- averaging may lead to reduced infrastructure based competition, although this may not necessarily be inefficient
- it could not be satisfied that averaging would be likely to promote competition in rural markets.

796. As noted above, the Tribunal also found that it was relevant to consider whether Telstra could use above normal profits from other services provided over the CAN that would allow it to subsidise urban line rental services.

797. Telstra has submitted that averaged ULLS prices will encourage competition on the basis that Telstra would be at a substantial competitive disadvantage compared to access seekers using ULLS in urban areas and WLR in rural areas. The Tribunal relevantly considered that efficient access seekers might still be able to compete with Telstra under an averaged price. However the ACCC considers that it is relevant to consider the guidance of the Tribunal on this matter:⁵¹⁵

it is not clear whether Telstra needs to set above-cost prices for retail line rental services in urban areas in order to recover the losses it makes from setting below-cost prices for retail line rental in rural areas. The material before us does not enable us to determine whether Telstra makes sufficient above normal profits from the provision of services over its CAN, other than line rental, to balance any losses it may make from the provision of below-cost retail line rental services. If Telstra did earn such above normal profits from the provision of other services over its CAN, it might be able to reduce the price of retail line rental services in urban areas closer to its costs of production by using the above normal profits to cover the losses it might make from setting below-cost prices for retail line rental services in rural areas.

798. The ACCC considers that, as Telstra has significant above normal profits from other services, Telstra would be able under a deaveraged price structure to both set line rental prices close to cost in urban areas and set below-cost prices in rural areas to compete with HomeLine Part or WLR provision of services. Conversely, under an averaged price structure, Telstra would be able to use its above normal profits on other services to undercut access seekers in urban markets who would face an averaged ULLS charge. The ACCC notes the Tribunal's conclusion that "Telstra should have considerable freedom to respond to competition in urban areas through the use of unregulated service offerings".⁵¹⁶ The ACCC considers that, in light of

⁵¹⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [92] to [146].

⁵¹⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [114].

⁵¹⁶ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [124].

Telstra's available above normal profits, this would be likely to reduce competition in urban markets for ULLS-based services, particularly in the broadband market, as competition would not be on the merits.

799. Telstra presents a number of submissions in relation to the Tribunal's views on above normal profits. The ACCC considers that the Price Equivalence Framework has little real effect. In particular, the ACCC adopts the conclusions of the Tribunal in reference to Telstra's Informational Equivalence Strategy under operational separation.⁵¹⁷ The framework confers no rights on any person and cannot be taken as a representation that Telstra will act or refrain from acting in any particular way.⁵¹⁸ Similarly, the ACCC does not consider that possible ACCC regulation would compensate for establishing a price structure that discourages competition. Further, the ACCC does not consider that an access provider would stop seeking profits simply because those profits were relevant to averaging – the access provider would continue to seek the greatest profits available and would invest accordingly, as it would still keep the full amount of any profits. As noted, the ACCC considers that the CCA RAF account presents a way to practicably account for profits, although the CCA results will understate actual productivity. The ACCC concedes that this analysis does not necessarily imply the same result for all time but notes the size of the surplus, the length of time of the determination and the current USO review are all relevant.
800. The ACCC notes that Telstra has submitted that there is significant competition feasible in rural areas.⁵¹⁹ The ACCC agrees that there are likely to be some Band 4 end-users for whom the provision of ULLS-based services is viable, and notes Telstra's information on current ADSL SIOs in that regard. However, the ACCC considers that competition in rural areas is still likely to be more limited, given that technical constraints do exist, that there are high capital costs of installing equipment in Band 4 because of the relative dispersion of end-users and the added disincentive of high backhaul costs (although Telstra should face a similar backhaul cost). The ACCC considers that any slight gain in competition in rural areas would be significantly smaller than the loss in competition in urban areas that would result from an averaged ULLS price. The ACCC also notes that such competition may not be economically efficient competition relative to alternative technologies.
801. Telstra also submits that having reference to above normal profits on other services could introduce a significant retail cost disadvantage relative to Telstra's rivals, leading to the result that "the playing field would be tilted against Telstra".⁵²⁰ The ACCC agrees that in the long-term such an arrangement might in theory create such a disadvantage. However the ACCC notes again the rebalancing available to Telstra and considers that, given the size and persistence of Telstra's surplus in its provision of fixed line services using the CAN, any retail cost disadvantage compared to access seekers would be minimal over the period of the final determination. The ACCC does not consider that there would be longer term competition effects given the pending

⁵¹⁷ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [316].

⁵¹⁸ Telstra, *Price equivalence framework strategy*, 30 June 2006, page 1.

⁵¹⁹ Telstra, above n 46, p. 5.

⁵²⁰ Telstra, above n 20, p. 13.

USO review.

802. In light of the above normal profits available to Telstra, the ACCC considers that an averaged ULLS price would tend to decrease competition in urban areas, and that any increase in competition in rural areas would by definition be significantly smaller than the loss of competition in urban areas.
803. The ACCC notes in general that it considers analyst reports may often be of limited value as they can be highly speculative. In relation to the particular reports cited by Telstra, the ACCC notes that Telstra has also submitted that regard should not be had to EBITDA.
804. Consistent with the views of the Tribunal, the ACCC does not consider that averaging or deaveraging ULLS charges will materially affect any-to-any connectivity.⁵²¹
805. In relation to the economically efficient use of and investment in infrastructure, the Tribunal considered that, if averaging were designed to recover no more than the overall costs of Telstra's infrastructure, operating costs and a normal return on capital, then averaging is likely to result in the economically efficient investment in Telstra's CAN and its ULLS.⁵²² Telstra cites this conclusion as supporting averaging.⁵²³ However, the ACCC notes that, based on the results from the PIE II model, Telstra's averaged charge of \$30 would not achieve this. In relation to the ACCC setting its own averaged charge, the ACCC does not consider that there is a reliable measure of Band 4 costs available with which to calculate an averaged charge.
806. In any case, the Tribunal also considered that, in relation to efficient investment by access seekers, averaged ULLS prices would discourage allocative, productive and dynamic efficiency, largely due to averaging creating a disassociation between prices and costs.⁵²⁴ It is uncontroversial that a disassociation of price and cost would lead to allocative efficiency losses, as consumers and investors will not receive the correct signals from cost-based pricing.⁵²⁵ However, Telstra submits that allocative efficiency already exists due to the impact of the other averaged products. The ACCC considers that this could be true to some extent. However, it does not consider that this means that allocative efficiency losses will not occur with an averaged ULLS price. In particular the ULLS provides a level of functionality and flexibility above all the services listed by Telstra that mean that allocative losses particular to the ULLS would arise.
807. In regard to productive and dynamic efficiency, Telstra submits that to the extent averaging promotes competition it will promote allocative and dynamic efficiency. As noted above, the ACCC considers that averaged charges will not promote competition

⁵²¹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [147].

⁵²² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [165].

⁵²³ Telstra, above n 46, p. 8.

⁵²⁴ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [172]-[175].

⁵²⁵ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [173].

and accordingly will not promote allocative and dynamic efficiency. Telstra submits that over the medium to long term its ability to gain sufficient returns over time will be diminished. The ACCC notes that, to the extent this may be true (despite the indications from the ACCC's analysis of RAF returns), it will not occur over the period of the determination and would also be dealt with in the pending USO review.

808. In relation to inefficient bypass, Telstra submits that the Tribunal considered that the risk of inefficient bypass was small.⁵²⁶ The ACCC considers firstly that the Tribunal's comment in relation to the WACC cannot be directly applied to consideration of averaging, where the price changes and relativities are significantly greater. However in any case the ACCC considers that the Tribunal also noted there was evidence that some degree of bypass was already occurring but that it was difficult to tell the extent to which inefficient bypass might occur.⁵²⁷ The ACCC agrees with this assessment, and considers that averaging would certainly in no way encourage efficient investment, even if the risk of bypass might be small. In relation to the possibility of Telstra negotiating to avoid inefficient bypass, the ACCC considers that the number of ULLS access disputes that have been notified would suggest that Telstra would be unlikely to achieve widespread commercially negotiated outcomes for ULLS pricing.
809. The ACCC does not consider that deaveraged ULLS prices would lead to inefficient entry at the retail layer, since both Telstra and access seekers would be able to compete. To the extent that there may be insufficient long term competition to drive prices to costs, or a transition period, the ACCC notes that this would hold under either averaged or deaveraged prices.
810. As noted above, the ACCC does not consider that the RPPO and deaveraged ULLS prices would be likely to affect Telstra's viability, given the ACCC's analysis of Telstra's RAF accounts. To the extent that this might occur in the long term, the ACCC notes again the size of the current surplus, the length of time of the determination and the current USO review.
811. In relation to Telstra's submissions about Government policy, the ACCC notes that Government policy, while a relevant consideration, will not mean that particular outcomes are economically efficient. In this respect, the ACCC concurs with the views of the Tribunal.⁵²⁸
812. In relation to the legitimate business interests of Telstra, the ACCC notes that the primary consideration in regard to averaging was not whether averaging was necessary to enable Telstra to recover its costs of and investment in the CAN but whether averaging is reasonable having regard to Telstra's legitimate interests.⁵²⁹ In that respect, and as submitted by Telstra, the Tribunal's major conclusions were that deaveraged ULLS prices had the potential to undermine Telstra's cross-subsidise

⁵²⁶ Telstra, above n 46, p. 9.

⁵²⁷ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [168].

⁵²⁸ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [174].

⁵²⁹ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [187].

rural and urban areas, and that averaged prices will not allow Telstra to over-recover its costs as long as the USF does not fully compensate Telstra for any losses it may incur. The Tribunal did not consider that above-average profits for other CAN services were relevant to consideration of this criterion, as it considered that averaging of itself would not lead to Telstra earning more revenues for these other services.⁵³⁰

813. Telstra pointed to its submitted analysis that it states demonstrate that it under-recovers from the USF.⁵³¹ The ACCC has considered this analysis above, and considers that the claimed under-recovery in that analysis is larger than realistic. Furthermore, CCA RAF results (which include USO revenue) demonstrate that Telstra is not under-recovering its line costs as a result of the RPPO or WLR pricing. Accordingly, the ACCC considers that, applying the conclusion of the Tribunal, that averaging would lead to recovery of greater costs than necessary to meet Telstra's legitimate business interests and recovery of its investment in its CAN.
814. The ACCC does not consider it is necessary to draw a firm conclusion on the likelihood of inefficient bypass. However the ACCC considers that there is evidence that bypass has occurred.
815. In relation to the interests of access seekers, the ACCC has long considered that access seekers' interest is in being able to compete on their relative merits. In relation to Telstra's submission that the criteria in paragraph 152CR(1)(c) requires the consideration of end-users, the ACCC considers that those interests are already taken into account in paragraph 152CR(1)(a). The ACCC has already considered that rural competition is possible but likely to be limited.
816. The ACCC agrees with Telstra that the relevant question is not simply the cost that access seekers will pay. In relation to Telstra's submission about averaged charges being in the interests of access seekers, the ACCC has already considered that averaged charges will prevent competition on the merits. Accordingly, averaged charges will not be in the interests of access seekers.
817. In relation to Telstra's submissions on access seekers' investments, the ACCC does not agree that particular prices were imposed by the ACCC. The ACCC notes that Telstra itself put forward de-averaged ULLS charges in proposals to the ACCC. The ACCC considers that averaged prices could strand those assets to the access seekers' disadvantage.
818. The ACCC does not consider it needs to review operational data for all access seekers. To the extent access seekers are inefficient, they will be eliminated in the market. What is the relevant consideration is whether all firms, including Telstra, are competing on an even playing field. Averaging will not lead to such competition on the merits.

⁵³⁰ *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [248].

⁵³¹ Telstra, above n 46, p. 13.

819. In regard to the direct costs of providing the ULLS, the ACCC endorses the view of the Tribunal that there are a number of cost recovery approaches, including averaging and deaveraging, that will allow the recovery of direct costs.⁵³² The ACCC accordingly does not consider that consideration of this criterion materially affects the question of whether ULLS prices should be averaged.
820. The ACCC notes Telstra's submission that averaged ULLS prices better reflect the "full direct cost" to Telstra of supply of the ULLS, under the RPPO. The ACCC considers that, in light of its conclusions about the extent to which Telstra is bound by the RPPO, this submission is not relevant.
821. The ACCC similarly considers that deaveraged prices will be consistent with the operational and technical requirements necessary for the safe and reliable operation of the CAN and the ULLS, and that this consideration does not affect any decision on averaging of prices. The ACCC's views on the economically efficient operation of infrastructure are contained above in its consideration of allocative, dynamic and productive efficiency.

Other relevant matters

822. Telstra has submitted that the ACCC should have regard to international precedent, citing the OECD report and US cases, as well as other industries.⁵³³
823. In regard to other industries and other countries, the ACCC observes that there are fundamental differences between countries and industries that mean comparisons should be treated with caution. Relevant differences include the definition of the regulated service, the applicable regulatory framework and government policy, the geographic price structure, the cost of capital, the nature of the product provided, the potential for bypass, the cost of capital, the prescribed cost standard (if any) and population concentration and distribution (as opposed to just population density).
824. Telstra submits in particular that the ACCC should look at its own Sydney Water decision. As noted in the ACCC's pricing principles report, a difference noted by the ACCC in making that decision was that the NSW government did not have a USO-style scheme in relation to water provision.⁵³⁴ In relation to gas and electricity infrastructure, there is usually no reasonable prospect of wholesale bypass. As such, the need for price signals may not be as significant as in telecommunications. The ACCC notes the different access regime for those industries. In relation to the US examples provided by Telstra, the ACCC notes that there are differences relating to the implementation of universal service programs and the possibility of the deaveraging of retail prices.

⁵³² *Telstra Corporation Limited (No 3)* [2007] ACompT 3 (17 May 2007) at [270] to [274].

⁵³³ Telstra, above n 46, p. 17; Annexure 4.

⁵³⁴ ACCC, *Access dispute between Services Sydney Pty Ltd and Sydney Water Corporation—arbitration report*, 19 July 2007, p. 44.

825. In reference to the OECD report, the ACCC has on many occasions noted Telstra's selective quoting from that report.⁵³⁵ In particular, the ACCC considers that a fuller extract demonstrates that the OECD advocates cost based access pricing and the use of a broad-based retail tax to cover the deficit.⁵³⁶ Furthermore, the OECD notes that the use of averaged ULLS charges may induce inefficient network duplication in low-cost areas and that accordingly would best be limited to situations where network bypass in natural monopoly areas is banned. The ACCC notes Telstra's further submissions on this issue. However the ACCC remains of the view that this is an accurate interpretation of the OECD report.
826. In any case, the ACCC considers that examples from other jurisdictions cannot bear more heavily on a decision about averaging than the matters listed in subsection 152CR(1). In light of the ACCC's views on those matters, the ACCC considers that such examples cannot be considered at all determinative.

High cost surcharge

827. In light of the ACCC's conclusions above, the ACCC does not consider that a high cost surcharge would be appropriate having regard to the subsection 152CR(1) matters.
828. The ACCC reaches the same conclusions about a high cost surcharge as it does about geographic averaging of ULLS prices.

Overall conclusion on the structure of prices

829. The ACCC considers on the structure of prices that, having had regard to the ULLS pricing principles and the matters under section 152CR of the TPA, that prices should be geographically deaveraged between the geographic bands. Geographically deaveraged ULLS charges will:
- better promote competition
 - better encourage the efficient use of and investment in infrastructure
 - meet the legitimate business interests of Telstra
 - better meet the interests of access seekers
 - ensure the operational and technical requirements necessary for the safe and reliable operation of the CAN
 - better lead to the economically efficient operation of the CAN.

⁵³⁵ ACCC, above n 5, p. 21.

⁵³⁶ OECD Competition Committee, *Access Pricing in Telecommunications*, 2004, pp. 134-135.

830. Accordingly, the ACCC has decided to set de-averaged prices for the ULLS in Bands 1, 2 and 3. As previously noted, the ACCC has decided not to set a price for Band 4.

4.1.13 Investment in infrastructure by which carriage services are supplied

831. In its initial submissions, Telstra submits that the ACCC should have regard to the level of investment in Optus' HFC network and to investment levels generally, and in particular a Telstra submission titled "Lack of telecommunications investment in Australia and prices to be set in the Optus HFC footprint".⁵³⁷ Telstra also submits that the ACCC should have regard to a report by LECG on "Access regulation and infrastructure investment in the telecommunications sector".⁵³⁸ In its supplementary submission, Telstra again submits that the ACCC must not limit itself to the information put by Telstra (and presumably other parties) in relation to the ULLS pricing principles but must also consider Telstra's investment submission.⁵³⁹ Telstra also provided the ACCC with a submission that referenced Optus' financial results.⁵⁴⁰

Submissions from parties

832. Telstra submits that investment in fixed networks in Australia is at an all time low, with Optus "closing down" its HFC network in favour of ULLS.⁵⁴¹ Telstra submits that in order to encourage investment by Optus in HFC and by access seekers in new networks more generally, the ACCC should set prices for ULLS in Optus' HFC network footprint at Telstra's commercially offered rates or at a rate that would encourage Optus to continue to invest in and expand its HFC network.
833. Telstra presents a variety of overall industry investment figures that it submits demonstrates lagging growth in telecommunications infrastructure.⁵⁴² It also submits that most investment has been by Telstra.⁵⁴³
834. Telstra submits that infrastructure investment by parties other than Telstra has not involved any comprehensive attempt to create newer and better communications systems, or invest in independent technologies. Instead, much of the investment has been on DSLAMs, while using "infrastructure owned by Telstra priced at below cost

⁵³⁷ Telstra, above n 37, pp. 9-12.

⁵³⁸ Telstra, *Telecommunications Access Disputes between Chime Communications Pty Ltd ("Chime"), Optus networks Pty Limited ("Optus"), XYZed Pty Limited ("XYZed"), Primus Telecommunications Pty Ltd ("Primus"), PowerTel Ltd ("PowerTel"), Request Broadband Pty Ltd ("Request"), Macquarie Telecom Pty Limited ("Macquarie") and Telstra Corporation Limited ("Telstra") regarding Unconditioned Local Loop Service ("ULLS")*, 26 October 2007.

⁵³⁹ Telstra, above n 20, p. 8.

⁵⁴⁰ Telstra, *Access disputes—Telstra and Chime, Optus, XYZed, PowerTel, Request and Primus*, 22 February 2008.

⁵⁴¹ Telstra, above n 71, p.2.

⁵⁴² Telstra, *op cit*, pp. 2-3.

⁵⁴³ Telstra, *op cit*, p. 3.

regulated prices.”⁵⁴⁴

835. Telstra refers to Optus' decreased investment in HFC as an example of ULLS take-up over further investment in own infrastructure. In particular, Telstra considers Optus has decreased its spending on its HFC network. Telstra provides examples of the US, Canada, and a number of European countries where cable networks have a healthy market share and are being further deployed and upgraded. It considers that these examples show that cable networks are capable of matching and even bettering the speeds offered by DSL technologies. Furthermore, cable deployment is continuing in jurisdictions where the ULLS is accessible at cost-based prices.
836. Telstra submits that the lack of investment in alternative infrastructure means that access prices to Telstra's fixed network are too low.⁵⁴⁵ Telstra considers that the ACCC should not “ignore the availability [of Optus's] HFC network when setting access prices.”⁵⁴⁶ Telstra submits that correct pricing would also give Optus incentives to compete more aggressively with its HFC.
837. Telstra submits that current ULLS access prices and those proposed by the ACCC are inconsistent with the LTIE in that consumers lose out on important dynamic efficiency benefits that are greater under facilities-based competition and allows greater service innovation.⁵⁴⁷ Telstra also contends that ULLS prices are below Optus' incremental cost of connecting a subset of customers, implying that prices are unlikely to be covering the TSLRIC of unbundled access to Telstra's customers, and therefore, Telstra contends, are not in Telstra's legitimate business interests.
838. Telstra also submits that the proposed pricing does not provide for the recoupment of the direct costs of providing the service, and thus is inconsistent with paragraph 152CR(1)(d) of the TPA. Telstra considers that Optus's refusal to 'in-fill' its network suggests that the ULLS price is below the relevant incremental cost to Optus of extending its network.
839. Telstra contends that given the deficit between the cost of providing ULLS and the proposed prices, the proposed prices would not lead to the economically efficient operation of a network.
840. Telstra submits that commercially agreed prices would not harm the interests of access seekers, as it would better lead to efficient pricing.⁵⁴⁸
841. In its submissions on the ULLS pricing principles, Telstra also submits that it needs clarification and explanations by the ACCC in relation to particular sentences in the ACCC's pricing principles report, namely:⁵⁴⁹

⁵⁴⁴ Telstra, *op cit*, p. 4.

⁵⁴⁵ Telstra, *op cit*, p. 6.

⁵⁴⁶ Telstra, *op cit*, p. 7.

⁵⁴⁷ Telstra, *op cit*, p.9.

⁵⁴⁸ Telstra, *op cit*, p.12.

- the possible explanations of investment levels in the industry
- evidence of the length of investment cycles in the industry
- how the relative size of other Australian industries affects Telstra's comparison of the proportional growth of investment in various Australian industries compared with that of the telecommunications industry
- what "alternative network" might be used in conjunction with the ULLS.

842. Telstra also submits that due to cost diseconomies associated with Australian capex and the impact of exchange rates, no clear implications for the adequacy of communications capex is supported by the OECD report referred to by the ACCC in its final decision on the ULLS pricing principles.
843. Telstra also repeats its submissions regarding the ULLS price the ACCC has set being below the TSLRIC+ of supply and that the ACCC should set prices for the ULLS in Optus's HFC network footprint at commercially agreed rates.⁵⁵⁰
844. Finally, Telstra submits that in making the final determination, the ACCC should fully consider the issues at hand – including the issue of the adequacy of communications investment in Australia.⁵⁵¹
845. Optus disputes Telstra's contention that it has not invested in its HFC network because it has been able to purchase low priced ULLS. Optus states that it has continued to invest in its HFC network over time. It also submits it has a business rule to not sell ULLS services where HFC is available.
846. Optus considers that it cannot be concluded that the lack of infill is related to ULLS price. Optus submits that, even in the absence of the ULLS, it may not be feasible for technical reasons and commercially viable for it to provide telephony services via the HFC to a given residential customer building (including single dwelling units (SDUs) and multi-dwelling units (MDUs)). It may not be feasible for SDUs, because in heritage areas, overhead access is denied and undergrounding is not feasible and the quality of voice telephony deteriorates once the distance is over 50m. For MDUs, reasons include the original network design not accommodating MDUs and difficulties in securing agreement from body corporates. Also, viable access to MDUs has not been available via the ULLS due to a ULLS issue regarding MDUs. Optus refers to the ongoing access dispute between Optus and Telstra regarding provisioning of ULLS in MDUs.
847. Optus also submits that it also may not be commercially attractive for Optus to provide telephony services via its HFC network. Optus submits that even "*prior to the*

⁵⁴⁹ Telstra, above n 20, pp. 8-10.

⁵⁵⁰ Telstra, *op cit*, pp. 9-10.

⁵⁵¹ Telstra, *op cit*, p. 10.

emergence of the ULLS” as a viable alternative option, a business case could not be found for MDU access via the HFC. In inactive areas, activating these areas can cost up to \$50,000 for each node. These inactive areas tend to be in low density areas, making it difficult to achieve economies of scale.

848. Optus also submits that it is incorrect for Telstra to assume that the incremental cost to Optus of providing telephony services via its HFC to particular residents within the network’s geographic footprint is an appropriate benchmark for the cost to Telstra of providing the ULLS. This is because Telstra’s submission assumes that ULLS costs may be benchmarked against HFC costs given they compete successfully against each other in other jurisdictions and the cost to Optus of infilling its HFC network is comparable with the typical costs of international HFC operators.
849. Optus states that its HFC’s lack of economies of scale means its costs are probably higher than international HFC operators’. Also, cable companies in other jurisdictions are often primarily pay TV operators, with voice telephony being a less significant business. Providing voice telephony to infill customers over the HFC requires substantial retrofitting, making it significantly more expensive than provision of pay TV services. Optus also notes that while the TSLRIC+ of the ULLS is likely to exceed that of serving the *average* HFC customer, it would not necessarily exceed those for *particularly difficult* customers, especially if HFC has more variable costs than the copper network. For example, customers located a significant distance from the road would receive weakened signals, necessitating additional repeaters, frequency boosters, etc. This problem does not occur with the copper network.
850. In its response to reply submissions, Telstra submits that Optus’ submissions that it does not sell ULLS where HFC is available should mean that Optus should not have any difficulty with Telstra’s proposition to not have ACCC-set prices in HFC areas.⁵⁵² It also submits that technical complexities are inherent in all networks, that Optus was aware of the Australian legal regime when it deployed its network and that Optus’ submissions on growth in communications investment are misleading.⁵⁵³
851. On 19 December 2007, Telstra also submitted that the ACCC should have regard to Telstra’s submissions in support of an exemption application in Optus’ HFC network footprint. Telstra enclosed a submission dated 17 December 2007 relating to an application Telstra had made for an exemption from standard access obligations relating to the ULLS, and statements from Michael G Harris and Professor Martin Cave.
852. On 22 February 2008, Telstra further submitted that the increase in ULLS customers over the 2007 financial year in Optus’ recent financial results demonstrated that Optus “prefers the cheaper alternative of ULLS over investment in its own HFC network”.⁵⁵⁴

⁵⁵² Telstra, above n 49, p. 10.

⁵⁵³ Telstra, *op cit*, pp. 10-12.

⁵⁵⁴ Telstra, *Access disputes—Telstra and Chime, Optus, XYZed, PowerTel, Request and Primus*, 22 February 2008, p. 2.

ACCC's view

853. Firstly, given the proposed timeframe for the final determination, the ACCC notes that the issues raised by Telstra in relation to its exemption application in respect of all declared services supplied in the Optus HFC footprint are more appropriately considered within the ACCC's exemption processes. The submissions are being considered in that context.⁵⁵⁵ However, in respect of the way these submissions relate to the terms of the FD, the ACCC has considered Telstra's arguments.
854. In terms of applying the subsection 152CR(1) criteria, the first matter concerns the LTIE. (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of the economically efficient investment in infrastructure, and subsidiary matters. (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), and subsection 152AB(7A)).
855. Telstra submits that competition with the Optus HFC network, if ULLS prices were set at the levels proposed by Telstra, could lead to greater competition caused by increased dynamic efficiency and service innovation. However, the ACCC does not consider that the possible efficiency benefits from increasing the ULLS price in Optus HFC footprint areas would clearly outweigh the potential detrimental effects upon competition in downstream markets and on productive efficiency. The ACCC discusses these matters further below in paragraphs 856 to 859 of this statement of reasons. The ACCC notes Telstra's submissions on Optus' ULLS numbers but, on the evidence presented to the ACCC, Optus uses the ULLS where it is not able to feasibly supply using HFC. As such, the terms of access to the ULLS will not have a direct influence on Optus's use of HFC.
856. Telstra submits that there is no technical reason why wholesale services could not be supplied over a HFC network (although vendor equipment does not yet exist to support access seeker control over the quality of those services). However, Optus does not currently supply a wholesale broadband service over the HFC network, and as cable broadband services are not declared under the Act, a service provider could not require Optus to do so. Even if in future Optus supplied a wholesale broadband service over the HFC network, the ACCC does not consider that such services would comprise a close substitute to existing ULLS-based DSL and voice services. In contrast to ULLS-based DSL services, the Optus HFC network does not pass the majority of end-user premises, not all premises within 'the footprint' are connected to the network, and different customer equipment is required when supplying cable broadband services. Upgrades to the Optus HFC network may also be necessary before an equivalent quality of service could be supplied over that network.
857. Even if improvements were made to the Optus HFC to allow delivery of the full suite of business and retail services to provide the potential for effective substitutability

⁵⁵⁵ ACCC, *Telstra's exemption application relating to SingTel Optus' HFC network—discussion paper*, January 2008.

between the ULLS and the equivalent products on HFC, there would be a delay in implementing these improvements. The ACCC expects this implementation time to be longer than the duration of the final determination (which expires on 30 June 2008).

858. Accordingly, the ACCC considers that not setting access prices based on the presence of the HFC network would not have a significant encouraging effect on competition. However, not setting access prices in the HFC footprint would tend to inhibit competition by ULLS access seekers in downstream DSL and voice services markets, and inhibit access seekers' ability to provide differentiated service offerings such as ADSL2+.
859. Further, in those areas that can be serviced by the Optus HFC network, the ACCC considers that the presence of two vertically-integrated networks would not necessarily be sufficient to ameliorate the need for ex ante regulation, or support a different approach to setting terms of access within those areas. For instance, it can be noted that while Telstra retails higher quality, ADSL2+ services over its network, Telstra has not felt compelled to respond to the presence of the Optus HFC by providing a wholesale equivalent product.
860. Similarly, and in relation to Telstra's wider submissions about investment levels generally, while a number of fixed and mobile wireless networks are currently being deployed, these developments are still in their early stages. While it is an open question as to what extent services on these new networks will offer viable alternatives to those services provided via Telstra's copper CAN, the ACCC considers that these emerging networks will not provide strong competitive constraint over the period of the final determination.
861. The ACCC does not consider that the objective of achieving any-to-any connectivity affects its consideration of whether to set prices in the HFC footprint, or that the matters identified in paragraph 152AB(6)(a) are relevant.
862. In relation to Telstra's legitimate commercial and business interests, the ACCC considers that its final determination ULLS prices are sufficient to meet Telstra's interests in recovering the efficient costs associated with supplying ULLS. Accordingly setting prices in the HFC footprint would not affect these legitimate interests.
863. Telstra submits that ULLS prices influence investment by other service providers in alternative, stand-alone access networks. Telstra singles out the possible effect of lower ULLS prices on investment in the Optus HFC footprint, implying that such prices may deter Optus from investing in upgrades to the HFC network within its existing footprint.
864. It is not apparent that the ACCC's regulatory approach to the ULLS inhibits investment in cable networks. Telstra has itself twice upgraded its HFC networks since the ACCC's decisions in December 2005 and August 2006 to reject Telstra's proposed prices for the ULLS. Similarly, Optus has announced upgrades to the speed of its HFC network. While Optus acquires the ULLS, on the information available to the ACCC, this is not done to the detriment of servicing customers over HFC. The

ACCC notes Optus' submissions in that regard.

865. In the longer term, it does not follow that the ACCC's approach to ULLS prices would tend to discourage, rather than encourage, other network operators to invest in their existing access networks. The resulting increase in competition provided by ULLS-based suppliers in downstream services could be expected to encourage Optus to upgrade the capability of its HFC network to match prevailing product offerings and service levels. The ACCC notes that there is evidence of this occurring already.⁵⁵⁶
866. Further, the ACCC does not consider that the ULLS access seekers would be able to efficiently duplicate Telstra's access network at this time, and hence considers that pricing in the HFC footprint for the purpose of this final determination would not discourage the ULLS access seekers from making efficient investments in their own access network.
867. The next matter is the legitimate business interests of the provider and its investment in facilities used to provide the ULLS (paragraph 152CR(1)(b)). This criterion is discussed as part of the first criterion. The ACCC considers that setting prices in the HFC footprint is consistent with Telstra realising its legitimate business interests, as the prices allow Telstra to recover its costs of providing ULLS access and a normal, risk-adjusted return on its investment.
868. The next matter is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). In relation to the interests of access seekers, the ACCC considers that Telstra's commercial rates greatly exceed efficient costs for the ULLS and that accordingly it would not be in the interests of access seekers to incur Telstra's commercial rates in the HFC footprint.
869. The next matter is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in providing access, to itself or others. The ACCC considers that the final determination ULLS prices allow recovery of the direct costs of the ULLS.
870. In relation to the matter in paragraph 152CR(1)(e), the cost of extensions to Telstra's ordering systems necessary to supply the LSS or ULLS have been taken into account in setting ULLS prices. These costs will be recovered if prices are set in the HFC footprint. The ACCC does not consider that the 'operational and technical requirements' matter in paragraph 152CR(1)(f) materially contributes to this decision.
871. The ACCC has considered which approach should be favoured in terms of enabling a carriage service, telecommunications network or facility to be operated efficiently, pursuant to subsection 152CR(1)(g). The ACCC's consideration is contained above in its assessment under section 152CR(1)(a).
872. The ACCC notes the LECG report that Telstra has submitted which seeks to

⁵⁵⁶ Optus, *Optus cable network hits high speed*, 17 December 2007.

demonstrate the relationship between European regulatory approaches and investment in alternative access networks. As the report relates to European jurisdictions, the ACCC considers that its applicability to the Australian jurisdiction is limited.

873. The ACCC notes Telstra's submission in its response on the ULLS pricing principles that it requires further information and an opportunity to respond on particular sentences in the ACCC's ULLS pricing principles. The ACCC does not consider that this is necessary, as the discussion in the pricing principles is clear and Telstra has, over the course of its submissions, provided submissions on all of the issues raised. As noted in the principles, the ACCC considers that it will best provide signals for build versus buy decisions by setting efficient cost-based prices. The ACCC disagrees with Telstra that its prices are inconsistent with efficient cost-based pricing.
874. In relation to Telstra's letter of 12 November 2007 concerning a reasonably willing seller and buyer, the ACCC considers, based on its considerations above, that a reasonably willing seller and buyer would not be achieved if the ACCC did not set prices in the HFC network footprint.
875. Having had regard to the section 152CR matters and the ULLS pricing principles, the ACCC considers that it should set prices for the ULLS in the HFC footprint.

4.1.14 Utilities (Network Facilities Tax) Act 2006 (ACT)

876. As noted earlier in these reasons, the ACCC's ULLS prices do not include an allocation of costs to account for the Utilities (Network Facilities Tax) Act 2006 (ACT).

4.1.15 Band Definitions

877. Telstra submits that the ACCC's proposed band definitions in the DFD would require Telstra to constantly monitor the number of SIOs in each ESA in order to ensure that Telstra complies with the final determination. Given that Telstra does not gather data in order to determine which ESAs would fall in the band classifications other than on a periodic basis; Telstra submits that this would place an onerous and costly burden on Telstra. Telstra has classified each ESA into the appropriate band according to the ACCC's proposed band definition.⁵⁵⁷ It recommends that the ACCC determine that these band classifications apply for the period of the determination.⁵⁵⁸

ACCC's views

878. The ACCC considers that its proposed band definitions may place some administrative burden on Telstra. However the ACCC notes that its definitions were taken from Telstra's own documentation.

⁵⁵⁷ Telstra, *UI:201 - ESA by ULL Band*, 16 August 2007.

⁵⁵⁸ Telstra, above n 46, p. 55.

879. Telstra has provided a spreadsheet classifying each ESA into the appropriate band according to the ACCC's band definition, current as at 16 August 2007.⁵⁵⁹ The ACCC considers that it is appropriate, in the interests of certainty, to identify each ESA in the band assigned to it in Telstra's spreadsheet.
880. Accordingly, the ACCC has decided to use the band definitions proposed in the DFD, applying information on band classifications of ESAs available on the date the final determination comes into effect, for the duration of the final determination.
881. As Telstra's spreadsheet is the most up-to-date information on the geographic classification of ESAs, the classifications in that spreadsheet will take effect from the date of the final determination and remain valid for the duration of the final determination.

4.1.16 Commencement date, expiry date and interest

882. As noted earlier in these reasons, the ACCC has backdated the ULLS monthly charge to the time the parties were first evidently in negotiations and has decided to apply prices until 30 June 2008. Interest is to be paid on resulting overpayments.

⁵⁵⁹ Telstra, above n 334.

4.2 ULLS single connection charges

4.2.1 Background

883. A ULLS connection can be made using:
- Telstra's standard ordering systems and processes; or,
 - a Managed Network Migration (MNM) process.
884. A ULLS 'single' connection is when Telstra's standard ordering system and processes are used, and comprise all ULLS connections that occur outside of a MNM process. Telstra also submitted that regard should be had to ULLS 'single' disconnection charges. Previously Telstra's connection charges had included an allocation of costs for disconnections and no separate ULLS disconnection charge was incurred by access seekers. The ACCC considers ULLS disconnection charges below in section 4.2.8.
885. Telstra, Optus, XYZed, Primus, PowerTel, Request and Chime participated in the joint arbitration hearing on the terms to apply to ULLS 'single' connections. In relation to transfers from LSS to ULLS, Telstra, Primus and Chime participated.
886. In the ACCC's draft final determinations (DFDs), the ACCC proposed the following prices for single ULLS connections:

Draft final determination ULLS single connection charges

IULLS and TULLS

	<i>Band 1</i>	<i>Band 2</i>	<i>Band 3</i>
<i>2004-05</i>	\$41	\$41	\$53
<i>2005-06</i>	\$41	\$41	\$53
<i>2006-07</i>	\$43	\$42	\$55
<i>2007-08</i>	\$45	\$44	\$57

4.2.2 Current charges

887. Chime, Optus, XYZed, Primus, PowerTel and Request are each in dispute with Telstra over ULLS 'single' connection charges.
888. The charges are addressed either in Customer Relationship Agreements (CRAs) or access agreements between each party and Telstra. Charges for

Chime, Optus, Primus, PowerTel and Request were specified in interim determinations for some part of the arbitration. Interim determinations for XYZed did not specify ULLS single connection charges.

4.2.3 Prior consideration

889. ULLS single connection charges were considered by the ACCC in its assessment of Telstra's December 2004 ULLS connection charges undertakings.⁵⁶⁰ The charges were also considered by the ACCC in setting the interim determinations identified above.

4.2.4 Principles to apply

890. The ACCC initially proposed to the parties as part of its DFD consultation paper that ULLS 'single' connection charges should be determined having regard to the draft ULLS pricing principles, as set out in:

- ACCC, Declaration inquiry for the ULLS, PSTN OTA and CLLS – final determination, July 2006, Chapter 7

and the previous ULLS pricing principles, as set out in:

- ACCC, Pricing of unconditioned local loop services (ULLS) – final report, March 2002.

891. Both these documents state that the ACCC will apply a TSLRIC pricing principle to the pricing of the ULLS. In practice, the ACCC typically includes a contribution to indirect or organisational costs (TSLRIC+).

892. The ACCC's view in its consultation paper was that, under those principles, ULLS single connection charges should comprise the forward-looking efficient costs of ULLS single connections and be de-averaged. However, it noted that averaged charges may be justified where the distortionary effect of an average charge is not significant.

893. Following the issuing of final ULLS pricing principles in November 2007, the ACCC consulted with the parties again on the applicability of those new pricing principles, as set out in:

- ACCC, Unconditioned local loop service—final pricing principles, November 2007.

894. The final pricing principles contained the following conclusions relevant to ULLS single connection charges:

- a TSLRIC+ pricing principle should be applied to the ULLS
- the ULLS charges should be geographically de-averaged

⁵⁶⁰ ACCC, *Assessment of Telstra's ULLS and LSS undertakings relating to connection and disconnection charges – draft decisions*, December 2005.

- connection charges should be set with reference to the amounts charged by third party contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.
895. The parties' submissions regarding the use of these principles have been discussed earlier in section 3.1 of these reasons. The parties are generally supportive of the use of the ULLS pricing principles to apply to ULLS single connection charges, although Telstra makes submissions against applying certain aspects of the ULLS pricing principles.
896. Specifically, in relation to connection charges, Telstra submits that averaged charges should be applied.⁵⁶¹ Primus, Optus, PowerTel/Request and Chime consider the charges should be de-averaged.⁵⁶²
897. Primus and Chime note explicitly that they support the ACCC's application of its principles and that the connection charge should reflect the forward looking efficient costs of connecting the ULLS.⁵⁶³ PowerTel and Request state that they accept the ACCC's approach to the principles to apply.⁵⁶⁴
898. Telstra also submitted in its response to the ACCC's supplementary consultation on pricing principles that it is uncontroversial that charges should include costs for jumpering work, indirect costs and back of house costs.⁵⁶⁵ Telstra also submits that it is an odd omission that that disconnection charges are not separately mentioned in the principles.⁵⁶⁶
899. Primus and Chime submitted in their responses to the supplementary consultation paper that they agree that connection charges should be set with reference to third-party contractor costs.⁵⁶⁷ Optus considers that the proposed pricing principles for connection charges are appropriate.⁵⁶⁸

⁵⁶¹ Telstra, *Unconditioned Local Loop Service ("ULLS")*, Submission of Telstra, Part 4 – ULLS Single Connections, 16 August 2007, p. 4.

⁵⁶² Primus, *Unconditioned Local Loop Service (ULLS)*, Submissions of Primus Telecommunications Pty Ltd (Primus), Part 3 – Single Connection Charges, 16 August 2007, p.1; Optus, *Unconditioned local loop service (ULLS)*, Submission of Optus, 16 August 2007, [9.13]; PowerTel & Request, *Unconditioned Local Loop Service*, Submissions of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination, 16 August 2007, p. 39; Chime, *Unconditioned Local Loop Service (ULLS)*, Submission of Chime Communications Pty Ltd (Chime), Part 3 – Single Connection Charges, 16 August 2007, p. 1.

⁵⁶³ Primus, above n 562, p. 1; Chime, above n 562, p. 1.

⁵⁶⁴ PowerTel & Request, above n 562, p. 36.

⁵⁶⁵ Telstra, *Access disputes – Chime, Optus, XYZed, Primus, PowerTel, Request, Macquarie and Telstra – ULLS*, 10 December 2007, page 10.

⁵⁶⁶ Ibid.

⁵⁶⁷ Primus *Unconditioned local loop service (ULLS)*, Submission of Primus Telecommunications Pty Ltd (Primus) regarding supplementary consultation paper on draft final determinations, 10 December 2007, p. 1; Chime *Unconditioned local loop service (ULLS)*, Submission of Chime Communications Pty Ltd (Chime) regarding supplementary consultation paper on draft final determinations, 10 December 2007, p. 1.

⁵⁶⁸ Optus, *Telecommunications Access Dispute: Telstra ULLS disputes – Consultation on Pricing Principles and related issues*, 5 December 2007, page 3

900. The ACCC has had regard to the final ULLS pricing principles from November 2007 in determining the ULLS ‘single’ connection charges.

4.2.5 Technical advice

901. Dr Paul Brooks of Layer 10 Pty Ltd (formerly of Consultel) was appointed by the ACCC under section 152DC(1)(e) of the TPA to provide expert technical advice to the ACCC about ULLS connection and disconnection costs. The ACCC informed the parties of this appointment in May 2007.
902. The ACCC has received a number of reports (some of a draft or interim nature) concerning the connection and disconnection of the ULLS. The reports that are relevant to an updated assessment of the efficient costs of ULLS ‘single’ connection and disconnection costs were prepared by Dr Brooks and include:
- Consultel, *Analysis of ULLS and LSS undertakings and subsequent submissions – final report*, February 2006;
 - Consultel, *Analysis relating to Primus-Telstra ULLS Dispute – interim report*, 13 March 2006;
 - Consultel, *Transferring Services between ULLS and LSS – Draft report*, 17 August 2006
903. The ACCC provided copies of these documents to the parties in June 2007.
904. In its June 2007 consultation paper, the ACCC proposed to the parties that the reports prepared should be considered and, further, that Dr Brooks’ views should be sought on relevant points raised in the parties’ submissions made on the DFDs. The ACCC sought the parties’ views on this approach.
905. Following the parties’ submissions and Dr Brooks’ provision of his finalised Layer 10 report to the ACCC on 23 January 2008, the ACCC provided the report to the parties for any further comments. This was because Dr Brooks reached certain limited conclusions in his report that parties had not had the opportunity to comment on previously.

Parties’ submissions

906. Telstra submits generally in its initial submission that the Consultel technical advice is not sound.⁵⁶⁹ Telstra submits that the reports are out of date and that the draft nature of the reports means that the views may not be fully reasoned. Telstra submits that parties should be given the opportunity to comment on finalised views.

⁵⁶⁹ Telstra, above n 561, p. 5.

907. Telstra also argues that Dr Brooks does not have the requisite costing qualifications and experience, and questions whether Dr Brooks is impartial.⁵⁷⁰
908. Chime submits that the Consultel reports provide useful advice in relation to the disputed charges.⁵⁷¹
909. PowerTel and Request submit that the Consultel reports provide a fair and reasonable basis for the ACCC's proposed approach.⁵⁷² They note that the Consultel conclusions are generally between positions advocated by Telstra and access seekers. They also advise that they consider the conclusions reached in the Consultel reports to be consistent with their experience. In their reply submission, PowerTel and Request submit that Dr Brooks could be considered more independent than Telstra's technical advisers.⁵⁷³
910. Optus in its reply submission submits that the ACCC should rely on the Consultel reports, as they constitute objective advice on processes and assumptions underpinning ULLS connections.⁵⁷⁴ Optus submits that other advice could not be considered objective. Optus notes that Dr Brooks challenges assumptions of both Telstra and access seekers.
911. Primus submits any Telstra concerns about outdated reports should increase the regard that should be had to its own reports.⁵⁷⁵ Chime makes a similar submission.⁵⁷⁶
912. After being given the opportunity to make submissions on the finalised Layer 10 report, Telstra submitted again that it had concerns about Dr Brooks' impartiality because Dr Brooks has spoken with access seekers.⁵⁷⁷

ACCC's views

913. The ACCC considers that Dr Brooks, operating as Consultel and then later as Layer 10, is qualified to provide advice to the ACCC regarding the systems and processes that are used to make 'single' ULLS connections and disconnections. The ACCC has appointed Dr Brooks to advise on these

⁵⁷⁰ Ibid.

⁵⁷¹ Chime, above n 562, p. 1.

⁵⁷² PowerTel and Request, above n 562, p. 36.

⁵⁷³ PowerTel and Request, *Unconditioned Local Loop Service, Submissions in reply of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 13 September 2007, p. 45.

⁵⁷⁴ Optus, *Unconditioned Local Loop Service (ULLS), Reply Submissions of Optus*, 13 September 2007, [5.6].

⁵⁷⁵ Primus, *Unconditioned Local Loop Service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus), Response to Part 4 of Telstra's Submission – ULLS Single Connections*, 13 September 2007, p. 2.

⁵⁷⁶ Chime, *Unconditioned Local Loop Service (ULLS), Reply Submission of Chime Communications Pty Ltd (Chime), Part 3 – ULLS Single Connections*, 13 September 2007, p. 2.

⁵⁷⁷ Telstra, *Unconditioned Local Loop Service ("ULLS"), Supplementary submissions of Telstra, Layer 10 Report – Connections, Disconnections and MNMs*, 12 February 2008, p. 1.

technical matters which are within his field of expertise. It has not called on Dr Brooks to provide expert advice on economic, financial or costing matters.

914. The ACCC considers that Dr Brooks is impartial and does not consider that he could reasonably be perceived to be otherwise. The ACCC considers that the fact that Dr Brooks has performed limited and sporadic work for companies acquiring the ULLS from Telstra does not give rise to an actual or material conflict of interest. The ACCC notes that Dr Brooks has not performed work for any of the access seeker parties participating in this joint arbitration hearing. Dr Brooks does not have any personal or financial interest in any of the ULLS access seekers participating in the joint arbitration hearing.
915. Accordingly, the ACCC considers that Dr Brooks is an appropriate expert to appoint under section 152DC(1)(e) to provide advice to the ACCC. The ACCC has had regard to the reports of Dr Brooks in reaching its decision and has referred relevant matters raised in parties' submissions in response to the ACCC's consultation paper to Dr Brooks for his further advice.
916. The ACCC provided parties with an opportunity to comment on Dr Brooks' draft reports in their submissions in response to the DFDs. The ACCC also gave parties the further opportunity to comment on Dr Brooks' finalised report, as it contained certain limited conclusions on which the parties had not had a chance to comment previously. Accordingly the parties had an opportunity to comment on all relevant information considered by the ACCC in making these final determinations.

4.2.6 Types of ULLS connections

917. The ACCC noted in its consultation paper that there are a number of different ULLS connection types that require separate consideration. The different types of connections are further discussed in the ACIF C569:2005 industry code.⁵⁷⁸

Vacant ULLS (VULLS)

918. A vacant ULLS or VULLS connection is a ULLS connection made on a line that at the time of the order is not being used to supply any service to an end-user.
919. The ACCC proposed in its consultation paper not to set prices for VULLS connections in the final determination in these disputes. This was because the ACCC understood that parties were not in dispute over VULLS connection charges.

In-use ULLS (IULLS)

920. An in-use ULLS (IULLS) connection is a ULLS connection where the ULLS is to be provided on a copper pair that was being used by Telstra to provide PSTN-based services on a wholesale or retail basis.

⁵⁷⁸ ACIF C569:2005, *Unconditioned Local Loop Service — Ordering, Provisioning and Customer Transfer*, 2005.

Transfer ULLS (TULLS)

921. A transfer ULLS (TULLS) connection is a ULLS connection where the ULLS is to be provided on a copper pair that was being used to supply a ULLS to another carrier or carriage service provider. The ACIF code specifies that the losing carrier or carriage service provider can include the access provider of the ULLS.
922. Given the similar jumpering and related connection work for both IULLS and TULLS connections, the ACCC proposed in its consultation paper to determine the same prices for IULLS and TULLS connections.

ULLS connections on lines previously being supplied with an LSS

923. An access seeker may request that a ULLS be connected on a line on which it, or a related entity, is acquiring a Line Sharing Service (LSS). As noted at paragraph 885 in these reasons, Telstra, Primus and Chime have participated in the joint arbitration hearing on the issue of transfers from LSS to ULLS. The ACCC's consultation paper did not propose determining prices for LSS-ULLS transfers in final determinations for access seekers that were not participating in the joint arbitration hearing in respect of those transfers.
924. For those parties participating in the joint arbitration hearing in relation to LSS to ULLS transfers, the ACCC considers such connections separately in the section of these reasons dealing with LSS-ULLS transfers.

Parties' submissions on definitional issues

925. Telstra, Primus and Chime agreed with the ACCC's position not to make determinations dealing with VULLS connections.⁵⁷⁹ Optus, XYZed, PowerTel and Request did not make submissions on this point.
926. The parties made submissions on the basis that IULLS and TULLS costs were the same. Primus and Chime stated explicitly that they agreed IULLS and TULLS charges should be the same.⁵⁸⁰
927. Telstra also raises concerns about varied descriptions or definitions of IULLS used in the DFDs and supporting material.⁵⁸¹ Telstra also submits more generally that definitions should be aligned with terms used in access agreements or ACIF codes to prevent uncertainty.⁵⁸²
928. Telstra also raises concerns about the drafting of the clause related to LSS to ULLS transfers, relating to when C-pair jumpering is removed.⁵⁸³

⁵⁷⁹ Telstra, above n 561, p. 8; Primus, above n 562, p. 2; Chime, above n 562, p. 2.

⁵⁸⁰ Primus, above n 562, p. 2; Chime, above n 562, p. 2.

⁵⁸¹ Telstra, above n 561, p. 8.

⁵⁸² Telstra, *op cit*, p. 6.

⁵⁸³ Telstra, *op cit*, pp. 6-7.

929. Optus submits in its reply submission that Telstra raised similar concerns about IULLS definitions in the interim determination context but that these did not impact practically on the implementation of that interim determination.⁵⁸⁴
930. PowerTel and Request do not consider the drafting of the DFD to be uncertain.⁵⁸⁵

ACCC's view on definitional issues

931. The ACCC has decided to maintain its position not to set prices for VULLS connections, as no party has submitted that such prices are in dispute.
932. The ACCC has similarly decided to set IULLS and TULLS prices at the same level, reflecting the similar costs for both types of connection.
933. In relation to whether definitions in the determination need to be changed, the ACCC does not consider that there is any uncertainty in the definitions it employed in its DFD. The terms IULLS and TULLS are well understood by the ACCC and the parties. While Telstra has noted that there are a number of descriptions used by parties, none of these descriptions are inconsistent with each other or with the ACIF code. Accordingly the ACCC does not consider that there is any need to amend the definitions in the determination.
934. The ACCC has considered Telstra's submissions relating to C-pair jumpering. It agrees with Telstra that it would be necessary to amend the terms of the determination to clarify that the prices only apply where C-pair jumpering is not required.
935. The ACCC considers that the drafting of the final determination is otherwise appropriate.

4.2.7 Assessment of efficient costs - connections

936. There are a number of distinct cost categories that are relevant to considering the efficient costs of ULLS single connections:
- jumpering, travel, vehicle, tool and materials (copper pair) costs
 - indirect costs
 - 'back-of-house' costs.
937. The ACCC's ULLS pricing principles state that connection charges should be set with reference to the amounts charged by third party (3P) contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.⁵⁸⁶

⁵⁸⁴ Optus, above n 574, [5.4].

⁵⁸⁵ PowerTel and Request, above n 573, p. 45.

⁵⁸⁶ ACCC, *Unconditioned local loop service (ULLS)—final pricing principles*, November 2007.

938. In the course of the consultation on the DFDs, Telstra also raised for consideration particular issues relating to cutover testing in the ACIF code and disconnection costs.
939. As noted above, the ACCC proposed in its consultation paper that prices be set for IULLS and TULLS connections as follows:

Draft final determination ULLS single connection charges

	<i>Band 1</i>	<i>Band 2</i>	<i>Band 3</i>
<i>2004-05</i>	\$41	\$41	\$53
<i>2005-06</i>	\$41	\$41	\$53
<i>2006-07</i>	\$43	\$42	\$55
<i>2007-08</i>	\$45	\$44	\$57

940. The components of the efficient costs of IULLS/TULLS connections are discussed below.

‘Back of house’ costs

941. Telstra staff and systems perform back-of-house tasks. For single connections, costs associated with the following Telstra workgroups and processes are considered within this category:
- Data activation centre (DAC)
 - Integrated deployment solution centre (IDS)
942. Costs associated with Telstra’s wholesale customer front of house activities are recovered through ULLS annual charges.
943. The ACCC proposed in its consultation paper to generally adopt the approach to back-of-house costs discussed in the ACCC’s draft decision on Telstra’s ULLS connection charge undertaking.⁵⁸⁷ These costs were also discussed by Consultel.⁵⁸⁸ This involved making an allowance for efficient DAC and IDS group costs, on the basis that an efficient operator would incur these costs, and that these are not recovered through other charges.
944. This approach resulted in an allowance in the charges in the DFDs of around \$12 for back-of-house costs associated with ULLS ‘single’ connections.
945. The ACCC’s consultation paper sought the parties’ views on this approach.

⁵⁸⁷ ACCC, above n 560, pp. 40-45

⁵⁸⁸ Consultel, *Analysis of ULLS and LSS undertakings and subsequent submissions – final report*, February 2006, pp. 30-38, 56-57.

Parties' submissions on back-of-house costs

Time allowed for back-of-house activities

946. Telstra states in its initial submissions that it does not object to the ACCC's proposed allowance for IDS group costs (although it submitted that it did not necessarily accept the ACCC's methodology). However it submits that the ACCC's proposed allowance of \$4 for DAC costs substantially underestimated Telstra's efficient costs. Telstra estimates those costs at \$[c-i-c] (with cutover testing) and \$[c-i-c] (without cutover testing).⁵⁸⁹ Telstra submits that the ACCC's proposed allowance underestimates both the labour rate and amount of time required by the DAC.⁵⁹⁰
947. Telstra submits that the total average DAC time required for a IULLS or TULLS connection is [c-i-c] minutes, (compared to 4 minutes proposed by the ACCC) of which [c-i-c] minutes is for cutover testing.⁵⁹¹ Telstra submits that the percentage of connections requiring manual intervention for service qualifications, POI validation and cable assignment is currently [c-i-c] per cent of cases, and was historically at [c-i-c] per cent, compared to the ACCC's proposed proportion of 10 per cent.⁵⁹² Telstra's claim for these activities is based on a [c-i-c]% occurrence for manual SQ activities for all ULLS activities and an estimated [c-i-c] minutes and [c-i-c] seconds for such activities when they occur (leading to a cost claim per connection of around \$[c-i-c]).⁵⁹³
948. Primus and Chime both note in their initial submissions that Consultel's average DAC time estimate would be 3 minutes (over a range of 2-4 minutes) and submit that the upper value of 4 minutes allowed by the ACCC is excessive.⁵⁹⁴ Primus submits that using a 'generous' hourly rate of \$60 per hour would warrant using the lower end of the DAC time range of 2 minutes.⁵⁹⁵ Telstra in its reply submission submits that the 2-4 minute allowance is inadequate.⁵⁹⁶
949. PowerTel and Request's initial submission does not dispute the back-of-house allowances the ACCC proposed in its discussion paper.⁵⁹⁷
950. Optus' initial submission questions whether any DAC manual intervention is required for IULLS and TULLS connections and, consequently, submits that the DAC allowance should be reduced by \$2.⁵⁹⁸ Optus also submits that the

⁵⁸⁹ Telstra, above n 561, pp. 13, 16.

⁵⁹⁰ Telstra, *op cit*, p. 13.

⁵⁹¹ Telstra, *op cit*, p. 16 (as amended by Telstra's letter of 5 September 2007).

⁵⁹² Telstra, *op cit*, p. 17.

⁵⁹³ Sankey, Craig, *Statement of Craig John Sankey*, 16 August 2007, [23]-[25] (as amended).

⁵⁹⁴ Primus, above n 562, p. 10; Chime, above n 562, p. 7.

⁵⁹⁵ Primus, above n 562, p. 11.

⁵⁹⁶ Telstra, *Unconditioned Local Loop Service ("ULLS")*, *Submissions in reply of Telstra, Part 3 – ULLS Single Connections*, p. 6.

⁵⁹⁷ PowerTel and Request, above n 562, p. 38.

⁵⁹⁸ Optus, above n 562, [9.8].

grounds for manual intervention identified in the Sankey statement are not relevant as Optus carries out a service qualification check before the order is placed, removing any of the issues identified by Telstra. Optus therefore submits that an assumption that 10 per cent of lines require manual intervention is overly generous to Telstra.⁵⁹⁹

951. Primus and Chime support Optus' contention that there is little need for manual intervention in IULLS and TULLS connections.⁶⁰⁰ Both parties submit that removing the manual intervention time allowance would reduce Telstra's claimed DAC time to 7 minutes, and closer to the estimate of 2-4 minutes in the ACCC's consultation paper.⁶⁰¹

Salaries

952. Telstra also submits in its initial submission that the \$60 per hour labour rate proposed by the ACCC is insufficient. Telstra submits that it estimates the efficient hourly rate to be \$[c-i-c] per hour.⁶⁰² Telstra submits that there is no supporting evidence for the \$60 rate.
953. Chime submits that the annual salary of \$80,000 used by the ACCC to calculate an efficient IDS cost is too high.⁶⁰³ Chime submits that the evidence of Chime's own staff and from a salary survey demonstrate that the wages allowed by the ACCC for IDS and DAC activities are too high.⁶⁰⁴ Primus similarly submits that the ACCC's proposed \$60 hourly rate for DAC costs is too high, and that IDS costs appear too high.⁶⁰⁵ It proposes that an hourly rate of \$28.28 apply for DAC work, based on what Primus submits is the salary of Primus staff members performing equivalent work to Telstra's DAC.⁶⁰⁶ Optus' initial submission considers the \$60 hourly rate for DAC activities to be reasonable.⁶⁰⁷
954. Telstra, in its reply submission, submits that the salaries put forward by Chime and Primus do not reflect equivalent work to that performed by Telstra's back-of-house staff.⁶⁰⁸ Telstra also submits that Primus' claimed uplifts appear extremely low or that Primus must be paying only the minimum wage.
955. In its reply submission, Primus submits that Telstra's claimed \$[c-i-c] per hour rate lacks sound reasoning and supporting information, and reiterates its

⁵⁹⁹ Optus, above n 574, [5.15] to [5.18].

⁶⁰⁰ Primus, above n 575, p. 6; Chime, above n 576, p. 5.

⁶⁰¹ Ibid.

⁶⁰² Telstra, above n 561, p. 21; Telstra, above n 596, p. 6.

⁶⁰³ Chime, above n 562, p. 5; Chime, above n 576, p. 4.

⁶⁰⁴ Chime, above n 562, p. 6.

⁶⁰⁵ Primus, above n 562, p. 8; Primus, above n 575, p. 4.

⁶⁰⁶ Primus, above n 562, pp. 8-10.

⁶⁰⁷ Optus, above n 562, [9.9].

⁶⁰⁸ Telstra, above n 596, pp. 5-6.

submission that its submitted rates are more appropriate.⁶⁰⁹ Chime similarly submits that its submitted salary information is more reliable.⁶¹⁰

Cutover testing

956. Telstra also submits in its initial submissions that the ACCC needs to include an allowance for cutover testing. However it submits that there need not be an allowance beyond 10 October 2007, reflecting an agreement with access seekers not to provide cutover testing for IULLS connections.⁶¹¹ Telstra submits that a [c-i-c] minute allowance for cutover testing should apply for connections made before October 2007. This is based on cutover testing being performed for [c-i-c]% of connections and an average of [c-i-c] minutes DAC time being required for cutover testing.⁶¹²
957. Telstra submits that this is appropriate as Telstra was required to undertake cutover testing upon access seeker request under the ACIF Code 569: ULLS Ordering, Provisioning and Customer Transfer (ULLS O&P code).⁶¹³ Telstra also argues that the ACCC is bound by its model non-price terms and conditions determination to uphold ACIF code requirements in arbitration determinations.⁶¹⁴ Telstra submits that the model non-price terms at a minimum endorse the ACIF ULLS O&P code and that the cutover testing requirement in that code should therefore be recognised in the determinations.⁶¹⁵
958. In relation to cutover testing, Optus submits that the cutover testing process is unnecessary for IULLS orders, and that the process is hence inefficient for such orders. Accordingly Optus submits that no cost allowance should be allowed.⁶¹⁶
959. Primus submits that Telstra has provided no evidence of requests by access seekers for cutover testing and it should therefore not be entitled to an allowance for unnecessary costs in charges.⁶¹⁷ Chime makes an equivalent submission.⁶¹⁸
960. Access seeker parties did not comment specifically on the [c-i-c] minutes claimed by Telstra as an appropriate time period for cutover testing to take place.

Further submissions on back-of-house costs

⁶⁰⁹ Primus, above n 575, p. 7.

⁶¹⁰ Chime, above n 576, p. 6.

⁶¹¹ Telstra, above n 561, p. 17.

⁶¹² Sankey, Craig, above n 593, [27].

⁶¹³ Telstra, above n 561, pp. 17-20.

⁶¹⁴ Telstra, *op cit*, p. 19.

⁶¹⁵ Telstra, *op cit*, p. 20.

⁶¹⁶ Optus, above n 574, [5.19] - [5.20].

⁶¹⁷ Primus, above n 575, p. 7.

⁶¹⁸ Chime, above n 576, p. 6.

961. Following the opportunity to make submissions on the finalised Layer 10 report, the parties provided some further submissions. Relevantly, the finalised Layer 10 report proposed that an allowance of 8 minutes for DAC time would be appropriate for the ULLS, when no cutover testing occurred. This amount takes into account the [c-i-c] minutes estimated by Telstra for DAC cutover activities and a one minute allowance for manual SQ activities, benchmarked against the LSS.⁶¹⁹ The Layer 10 report also stated that [c-i-c] minutes would be an appropriate allowance for cutover testing if it was appropriate to charge for such testing.⁶²⁰
962. Telstra submits that, in regard to the amount of time taken for connection charges, that the higher 8 minute allowance in the finalised Layer 10 report should be adopted by the ACCC if it did not accept Telstra's views.⁶²¹ It also submits that an allowance for cutover testing should be included for the period before agreement had been reached for cutover testing to be discontinued.⁶²²
963. Optus submits that 1 minute for manual SQ is overly generous to Telstra.⁶²³ It also submits that the total 8 minutes would appear overly generous. In relation to the use of a single price for IULLS and TULLS connections, Optus submits that the higher IULLS cost should not simply be adopted. It also reiterates that it considers cutover testing unnecessary.⁶²⁴
964. Chime and Primus state that they agree with an allowance of 1 minute for manual SQ activity.⁶²⁵ They submit also that cutover testing is usually unnecessary and should not be charged unless requested by the access seeker, but that an accurate measure of the time taken for cutover testing would be around 1.5 minutes. Chime and Primus also submit that the 7 minute allowance would appear excessive and that it should be reduced to 2.6 minutes, given Telstra's past claims of [c-i-c] minutes for total DAC activity and estimate of [c-i-c] minutes for cutover testing activity.⁶²⁶

ACCC's views

965. A number of issues in relation to back-of-house costs are not controversial. The parties do not dispute that some back-of-house costs would be appropriate, although parties disagree on whether particular cost categories

⁶¹⁹ Layer 10, *Analysis relating to ULLS access disputes—Primus, Chime, Optus, XYZed, Request, PowerTel and Telstra*, January 2008, p. 40, 42.

⁶²⁰ Layer 10, *op cit*, p. 41.

⁶²¹ Telstra, above n 577, p. 4.

⁶²² Ibid.

⁶²³ Optus, *Telecommunications access disputes: Telstra ULLS—Chime, Optus, XYZed, PowerTel, Request and Primus (connections)—Layer 10 connection charges report*, 12 February 2008, p. 2.

⁶²⁴ Optus, *op cit*, p. 3.

⁶²⁵ Chime, *Unconditioned Local Loop Service (ULLS), Submission of Chime Communications Pty Ltd (Chime) regarding supplementary consultation paper on draft final determination*, 12 February 2008, p. 4; Primus, *Unconditioned Local Loop Service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus) regarding supplementary consultation paper on draft final determination*, 12 February 2008, p. 4.

⁶²⁶ Chime, *op cit*, p. 5; Primus, *op cit*, p. 5.

should be allowed, and the amount of costs that should be allowed for those categories. The ACCC's pricing principles similarly recognise that an allowance for back-of-house costs is appropriate.⁶²⁷

966. The ACCC has not make an allowance for wholesale front-of-house costs, as these costs have been recognised in the cost pool to be recovered through ULLS annual charges.
967. The main issues raised by the parties for consideration in relation to back of house costs relate to:
- time needed for DAC activity
 - salary costs
 - cutover testing
968. The ACCC considers these issues below.

Time needed for DAC activity

969. The ACCC has considered the parties' submissions about the average time allowed for DAC activity. The ACCC's consultation paper proposed a total allowance of 4 minutes for DAC activity, as recommended by the Consultel February 2006 report. Following submissions from the parties, Dr Brooks revised his view and considered that an allowance of around 8 minutes would be appropriate. The finalised Layer 10 report identifies three discrete tasks (other than cutover testing, which is considered separately below) that would require DAC involvement:
- manual service qualification (SQ)—trace bad/missing cable records, calculate attenuation, enter into Telstra's ULL Carrier Interface System (ULLCIS)
 - manual service qualification—validate POI and assign MDF metallic path
 - DAC cutover activities, including assisting with connection problems
970. The Layer 10 report recommends an allowance of 1 minute for the first two of these tasks combined, and an allowance of 7 minutes for the DAC cutover activities. The basis for the 1 minute allowance was that the amount of time on manual service qualification activities for IULLS connections should not on average exceed the amount of time required for such activities with respect to LSS connections.⁶²⁸ This contrasted with the Telstra cost claim that sought a recovery based on the percentage of manual SQ incurred for all ULLS connections.

⁶²⁷ ACCC, above n 586, p. 23.

⁶²⁸ Layer 10, above n 619, p. 40.

971. Layer 10 adopted Telstra's estimate of [c-i-c] minutes for cutover activities including assisting with connection problems, but indicated that that amount may be generous.⁶²⁹ This exceeds the equivalent allowance of 1 to 2 minutes for the LSS.⁶³⁰
972. The ACCC accepts Layer 10's analysis, and considers that this supports a finding of DAC involvement requiring around 8 minutes of DAC activity on average per ULLS connection. Acceptance of this amount is a conservative position for the ACCC as it uses an amount that has been identified as potentially generous. In relation to Primus' and Chime's submissions that 2.6 minutes should be allowed for assisting with connection problems based on past Telstra estimates of total DAC activity, the ACCC does not consider that this approach is reasonably open to it at this time. Telstra has revised its DAC cost claims since the time of the [c-i-c] minute estimate and basing an allowance on older material may lead the ACCC to potential error in light of updated submissions and advice on the matter.
973. The ACCC notes that the main issue for consideration in accepting this allowance is the use of an allowance for manual service qualification based on the equivalent LSS allowance as a proxy. This approach is used because in both circumstances the path of the copper line is known and has previously been carrying a service. Accordingly the ACCC considers that there should be no greater allowance for manual service qualification for IULLS than for LSS.
974. The ACCC considers this approach below against the legislative matters.
975. Having regard to the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A) and subsection 152AB(8)).
976. The ACCC considers generally that efficient, forward-looking costs of ULLS connections best promote competition. The ACCC's ULLS pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which of the possible approaches best estimates efficient forward-looking costs. If charges faced by access seekers exceed the efficient forward-looking costs of connecting the ULLS, access seekers would face higher charges based on costs that Telstra could avoid in the long run and that Telstra would not itself face in making connections for its services. This would discourage efficient entry in downstream markets for voice and DSL services.

⁶²⁹ Layer 10, *op cit*, p. 43.

⁶³⁰ ACCC, *LSS access dispute—Telstra/Adam Internet—Reasons for Final Determination*, December 2007, p. 94.

977. There should be no manual SQ required for TULLS connections, given that a ULLS has already taken place on the line by definition. The relevant issues are therefore whether the average time spent for DAC manual SQ work for LSS connections is an appropriate benchmark for IULLS connections, and whether Telstra can achieve such a level of manual SQs in its IULLS connections. Telstra's submissions argue that it is appropriate to have regard to the current ([c-i-c]%) and past (around [c-i-c]% to [c-i-c]% pre-2006) proportions of overall ULLS connections requiring manual service qualification. Comparatively, the appropriate LSS cost allocation implies a percentage of around 5%. The ACCC considers that it is realistic to expect that Telstra would already incur, or over time be able to reduce IULLS manual SQs to, the level of manual SQs for the LSS. This is because both connection types are made on lines relating to an existing PSTN (and usually ADSL) line, on which records are complete and for which manual intervention should not be necessary.⁶³¹
978. Telstra's claims around the average times it spends performing ULLS manual SQs relate to the actual, current times it spends for all ULLS connections, not the forward-looking efficient average times it spends for IULLS connections. The ACCC considers that Telstra's claim does not represent a measure of Telstra's forward-looking efficient costs for IULLS connections, and is not the best available measure of those costs.
979. The ACCC does not consider that the approach taken to this issue will affect the objective of achieving any-to-any connectivity.
980. In relation to the efficient use of and investment in infrastructure, the ACCC considers the efficient use of and investment in both the infrastructure used to supply the ULLS and the infrastructure used to supply downstream services such as voice and DSL.
981. The ACCC considers that the efficient use of and investment in infrastructure will be encouraged where Telstra is able to recover the efficient forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. Connection charges including costs based on Telstra's current or past average times for ULLS manual SQs would lead to costs in excess of the efficient forward-looking cost, and would not represent efficient use of the infrastructure and records used for performing SQ tests. Charges based on Telstra's actual cost base would also be less likely to encourage Telstra to seek out cost reductions that are open to it. Connection charges above efficient levels would discourage efficient investment by ULLS access seekers in the infrastructure used to supply downstream services to end-users.
982. The ACCC considers that, in the long run, there should be no impediments to Telstra meeting the efficiency benchmark implied by LSS manual SQs. In fact, the average time should approach zero in the long run as records are updated. It could also be expected that the level of IULLS SQs is already at or approaching that level. In relation to the matters identified in paragraph

⁶³¹ Layer 10, above n 619, p. 38.

152AB(6)(a), the ACCC considers that it is technically feasible for Telstra to achieve that level of manual intervention.

983. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. Setting the DAC component in ULLS connection charges on the basis of the LSS benchmark could be contrary to Telstra's legitimate commercial interests should it prevent Telstra from recovering its costs. This would be the case if Telstra could not, in making IULLS connections, achieve the level of manual SQs implied by the average allowance for LSS connections. However, as discussed above, the ACCC does not consider that there are valid reasons why Telstra could not achieve such a level of manual SQ interventions for IULLS connections.
984. The ACCC does not consider that this issue will have a significant effect on Telstra's ability to exploit economies of scale and scope. However it notes that, in the presence of fixed costs of supplying the ULLS and downstream voice and DSL, Telstra will be able to exploit economies of scale and scope to the extent that lower charges will lead to increased demand for services.
985. Setting charges based on an efficient benchmark will give Telstra incentives to invest in efficient service qualification processes for the ULLS. Further, by promoting competition, there will be indirectly increased incentives to invest efficiently in the supply of ULLS and downstream services.
986. The next matter is the legitimate business interests of the provider and its investment in the facilities used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b) and the ACCC's views were discussed above. The ACCC considers that, in the short run, Telstra's legitimate business interests may not be met to the extent that it could not achieve the average level of manual service qualification achieved for the LSS. However, in the long run the ACCC considers that Telstra should be able to achieve at least that level of service qualifications.
987. The next matter is the interests of all persons who have the right to use the ULLS (paragraph 152CR(1)(c)). The ACCC considers that ULLS access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits. It is in the interests of those access seekers to pay charges that reflect the efficient, forward-looking cost of connecting services. Paying connection charges on the basis of Telstra's actual cost base is contrary to this interest, as it would mean access seekers having to pay higher charges which are in excess of forward-looking efficient cost. Furthermore, if charges were based on Telstra's actual cost base, then Telstra would be less likely to seek out cost reductions that are open to it, with the result that ULLS access seekers will continue to face excessive charges.
988. The fourth matter is the direct cost of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover those costs. The ACCC considers that Telstra will recover the direct cost of providing ULLS connections in the long run regardless of the approach taken here on manual SQs. This is because the ACCC considers that

there should be no need for a higher number of manual SQs for IULLS (or TULLS) connections than there should be for LSS connections, given that both connection types relate to a complete operating copper line.

989. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The cost of extensions to Telstra's ordering systems necessary to allow service qualifications to take place for the ULLS have been taken into account in other charges. The ACCC considers that the matter relating to safe and reliable operation does not materially contribute to this decision.
990. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has considered efficiency issues above in its consideration of the LTIE. The ACCC considers that allowing costs based on Telstra's current actual incidence of manual SQs for all ULLS connections would not promote the economically efficient operation of the customer access network (CAN).
991. The ACCC considers that it is necessary to weigh up the competing matters in section 152CR(1). On the one hand, allowing DAC costs on the basis of the LSS benchmark may be contrary to Telstra's legitimate business and commercial interests to recover the costs it currently incurs in making IULLS connections. However that effect, if any, should be small for IULLS connections, and any difference that may currently exist will reduce over time as Telstra achieves more efficiencies in its making of IULLS connections.
992. On the other hand, setting the allowance for manual SQ on an efficient benchmark will better promote competition and efficiencies in the use of and investment in both the Telstra infrastructure used to supply the ULLS and in infrastructure used to supply downstream services, and better meet the interests of persons with rights to use the declared ULLS.
993. The ULLS pricing principles are silent as to the details of calculating prices, simply noting that back-of-house costs should be taken into account. However the principles do specify that a TSLRIC+ pricing methodology should be used, which implies that efficient, forward-looking costs should be taken into account.
994. Having regard to the above matters, the ACCC has decided to adopt the LSS benchmark and use a 1 minute average time allocation for manual SQs, leading to a total of 8 minutes for DAC activity for IULLS and TULLS connections. The ACCC notes that IULLS connections are likely to form the majority of connections over the period of these final determinations.

Salary costs

995. Parties have provided conflicting views on the appropriate salary costs for Telstra staff members participating in back-of-house activities. Telstra has

submitted that the ACCC's allowance per hour is insufficient (although the ACCC notes that, for the relevant period 2007-08, the ACCC's proposed allowance was \$64 due to indexing, while the \$60 discussed in Telstra's submission applies for 2005-06) and proposes the use of a \$[c-i-c] hourly rate. Two access seeker parties have submitted that the ACCC's proposed hourly rate exceeds the efficient amount—Chime has submitted that a number in the order of \$45 would be appropriate, while Primus submits that a rate in the order of \$28.28 would be more appropriate. Optus and PowerTel/Request submit that the ACCC's proposed approach is appropriate.

996. In considering DAC costs where 8 minutes of DAC activity was allowed, adopting Telstra's proposed salary would increase costs for DAC activity by around \$[c-i-c] relative to the ACCC's proposed salary, while adopting Chime's and Primus' positions would reduce the costs by around \$2.50 and \$4.80 respectively.
997. Having regard to the subsection 152CR(1) matters, the first matter concerns the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
998. The parties' proposed salaries would better promote competition if they better reflect the forward-looking efficient costs of performing DAC tasks. The access seeker staff salaries and the survey presented by Chime both contain salary costs that are significantly lower than both the salary costs Telstra claims and that the ACCC proposed in its consultation paper. This evidence would suggest that Telstra would over-recover if either the ACCC's or Telstra's rates were used, and that salary costs should be reduced to better represent an efficient level. This would better encourage competition as Telstra would not enjoy an artificial cost advantage.
999. However there is some risk that using the salary costs in the surveys or from access seeker customer service staff would not be a suitable benchmark for efficient forward-looking costs. This is because the activities performed by the survey staff or access seeker staff may differ from the roles performed by Telstra's back-of-house staff. If so, using those costs may understate an efficient level, which would leave Telstra at a competitive disadvantage.
1000. The ACCC does not consider that the approach adopted on this issue would significantly affect the objective of achieving any-to-any connectivity.
1001. In relation to the efficient use of and investment in infrastructure, the considerations are similar to those above in the consideration of the promotion of competition. The salaries would better encourage the efficient use of and investment in infrastructure to the extent that they better reflect efficient costs. A cost reflective price more consistent with the salaries paid in a competitive

market for the ULLS would encourage competition in downstream services and encourage efficiencies in markets for those services.

1002. The next criterion is the legitimate business interests of the provider and its investment in the CAN which is used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b). The salary used in the cost model should reflect the efficient salary costs for Telstra's back-of-house activities. Using a salary that exceeds efficient salary costs would lead to the recovery of more than is necessary to meet Telstra's legitimate interests, while a salary less than that would tend to impinge on Telstra's legitimate interests. The ACCC considers that the issue of salary costs does not have a significant effect on economies of scale and scope.
1003. The next matter is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). Access seekers have an interest in being able to compete on their merits and paying an amount for connections commensurate with efficient costs. If the salary costs used in the model exceed efficient levels then this will tend to prevent access seekers from competing with Telstra on their merits. Alternatively, where the salary costs are below efficient levels then access seekers will have a potential cost advantage over Telstra.
1004. The next matter is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs in making connections to allow the provision of access to ULLS to access seekers. As noted above in the ACCC's consideration of paragraph 152CR(1)(b), the relevant issue is the extent to which the salary used in the model reflects efficient costs.
1005. The ACCC does not consider that the matters in paragraph 152CR(1)(e) and (f) materially contribute to consideration of the salary to be used. In relation to paragraph 152CR(1)(g), the ACCC has considered efficiency incentives in its consideration of the LTIE above.
1006. In view of the above matters, the ACCC needs to consider which salary it considers best approximates the efficient salary levels for back-of-house connection activity. The salary proposed by Telstra significantly exceeds the salary levels demonstrated in surveys and by access seekers for experienced customer service and support staff. Equivalently, the Telstra back-of-house activities may differ somewhat from the activities undertaken by access seeker staff or surveyed staff. However the ACCC considers that the [c-i-c]% difference in Telstra's price compared to the survey salary put forward by Chime appears larger than could be explained by this difference in activity.
1007. The ACCC has decided to maintain its use of a \$60 to \$64 per hour wage rate as neither the rates submitted by Telstra or access seekers are representative of efficient wage rates for back-of-house activity. This rate reflects a realistic point lying between the positions of the parties. It is also consistent with the ACCC's past approach to pricing DAC activities.

Cutover testing

1008. Telstra is required by the current ULLS ordering, provisioning and customer transfer code to provide cutover testing when requested by an access seeker. The code is a relevant consideration as it specifies procedures and obligations on parties for acquiring the ULLS. As pointed out by Telstra, the ACCC's Model non-price terms note that the ACIF codes are relevant considerations and that the ACCC will generally treat relevant aspects of the ACIF code as representing the standard for the model terms.⁶³²
1009. In the current case, the ACIF code says that Telstra must perform cutover testing when requested by an access seeker. However Telstra has negotiated with the access seeker parties to the joint arbitration hearing to end such requests from 10 October 2007 onwards. In a later submission, Telstra submits that no cutover testing has occurred for IULLS or TULLS since 22 October 2007.⁶³³
1010. Telstra submits that, because it was required to perform cutover testing on request, it should be allowed to recover costs of cutover testing on all connections (although it submits that this should be based on the proportion of cutover testing across all ULLS connections). Comparatively, access seekers submit that cutover testing need only be performed on request and is clearly not a necessary process given Telstra's decision to no longer perform cutover testing from October 2007 onwards. As such access seekers submit that cutover testing should not be included in efficient forward-looking costs.
1011. Having considered the parties' submissions, the ACCC considers that neither the position of Telstra nor that of the access seekers is necessarily appropriate. Based on Telstra's submissions, the cutover testing process is not necessary for IULLS connections. The ACCC considers that the process would equivalently be unnecessary for TULLS connections, given that both types of connections are made on lines that have had an operating service provided over them. Accordingly the ACCC considers that the cutover testing process is not necessary for IULLS and TULLS connections, and notes that Telstra submits that cutover testing has now ceased for both connection types.
1012. However, while the process may be inefficient or unnecessary, Telstra was still required to perform cutover testing on request due to the operation of the ACIF code. If the ACCC was to disallow cost recovery for cutover testing that had occurred in the past upon request from access seekers, Telstra would be unable to recover for costs incurred as a result of choices made by access seekers. In order to reflect Telstra's obligations under the ACIF Code, the ACCC considers that it would be appropriate for Telstra to be compensated for cutover testing performed where it was requested by access seekers.
1013. It would not be necessary to allow cost recovery for cutover testing for all ULLS connections, as submitted by Telstra. Rather, the ACCC could specify that the cost allowance for cutover testing only be incurred when Telstra was

⁶³² ACCC, *Final determination—model non-price terms and conditions*, October 2003, p. 11.

⁶³³ Telstra, above n 577, p. 2.

required to perform the testing because of a request by an access seeker. If no request was made, Telstra was under no obligation to perform the testing and its own submissions indicate that the process is unnecessary for IULLS connections. Furthermore, it cannot be assumed that every access seeker has requested cutover testing for the IULLS and TULLS in the [c-i-c]% proportion that has been performed across all ULLS connections. As noted in parties' submissions, the need for cutover testing is likely to be less for IULLS and TULLS connections than for VULLS connections. The ACCC considers that access seekers would similarly be less likely to request cutover testing for IULLS and TULLS connections than for ULLS connections overall.

1014. The ACCC considers the possible approaches in respect of the legislative matters below.
1015. Having regard to the subsection 152CR(1) matters, the first matter concerns the LTIE (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
1016. The ACCC considers generally that efficient, forward-looking costs of ULLS connections best promote competition. The ACCC's pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which of the possible approaches best estimates efficient forward-looking costs. If charges faced by access seekers exceed forward-looking efficient costs of connecting the ULLS, access seekers would face higher charges based on costs that Telstra could avoid in the long run. This would discourage efficient entry in downstream markets for voice and DSL services.
1017. All parties agree that the efficient forward-looking costs of ULLS connections do not include an allowance of costs for cutover testing, as they have negotiated that cutover testing is not required from October 2007. Accordingly, the ACCC considers that this matter would suggest that no allowance should be made for cutover testing in the cost of IULLS and TULLS connections.
1018. However, in considering efficient costs in relation to the period before October 2007, the ACCC considers that it is appropriate to consider a cost benchmark that reflects Telstra's ACIF code obligations. The ACCC considers that its approach best reflects this. The ACCC's approach, where a charge is incurred when cutover testing was requested by access seekers, relates the costs most closely to the actual access seeker requests which caused the costs to be incurred, and to whether particular access seekers considered that they required cutover testing in order to provide services and compete. On the other hand, Telstra's proposed approach leads to all access seekers paying for cutover testing, irrespective of whether cutover testing is necessary for such connections, whether particular access seekers caused cutover testing to occur

or whether particular access seekers considered that cutover testing was relevant to them. Access seekers' proposed approach of no cost recovery for cutover testing would lead to Telstra being unable to recover costs that it was obliged to incur by the ACIF codes, and would provide at least some access seekers with a competitive advantage from cutover testing which they would not have to pay for.

1019. The ACCC does not consider that the approach adopted on this issue would significantly affect the objective of achieving any-to-any connectivity.
1020. In relation to the efficient use of and investment in infrastructure, the ACCC firstly considers the efficient use of and investment in infrastructure used to supply the ULLS. The ACCC also considers the consequences for efficient use of and investment in the infrastructure used to supply downstream voice and DSL services.
1021. The ACCC considers that efficient use of and investment in the CAN will be encouraged where Telstra is able to recover the efficient, forward-looking cost of making ULLS connections. On this basis, connection charges should not include an increment for costs of cutover testing, as cutover testing is not an efficient process for IULLS and TULLS connections. However, as noted above, it is appropriate to consider where Telstra was required to carry out certain activities under the ACIF codes. The ACCC considers that its approach best recovers efficient costs, as it takes into account Telstra's obligations under the ACIF codes but does not allow charges for cutover testing which Telstra was not required to perform. Telstra's approach would lead to it recovering more than efficient costs for certain connections, while access seekers' approach would lead to Telstra recovering less than its efficient costs.
1022. In relation to the investment by access seekers in infrastructure used to supply downstream services, the ACCC considers that such use and investment would be distorted from efficient levels if a cost component for cutover testing was included in all connections or not included in any connections. The ACCC considers that efficient investment decisions will be better promoted by relating the costs to the requests by access seekers for cutover testing to occur.
1023. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. Not allowing any cost component for cutover testing would tend to be contrary to Telstra's legitimate commercial interests as it would not be able to recover for the costs of activities it was required to perform under the ACIF code. Equivalently, allowing cost recovery for cutover testing for all connections would tend to recover more than necessary to meet Telstra's legitimate commercial interests. The ACCC's proposed approach allows cost recovery for connections where cutover testing was requested and therefore required under the ACIF code, but not for other connections.
1024. The ACCC does not consider that the approach taken to cost recovery for cutover testing would be likely to have a significant effect on Telstra's ability to exploit economies of scale and scope. In relation to Telstra's ongoing incentives to invest in the infrastructure by which services are supplied, the

ACCC does not consider that the approach taken to cutover testing will have a significant effect, in light of the agreed cessation of cutover testing between the parties. Accordingly in the long run Telstra will be able to recover its costs plus a normal risk-adjusted return on investment whichever approach is chosen for past cost recovery.

1025. The next criterion is the legitimate business interests of the provider and its investment in the CAN which is used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b) and the ACCC's views have already been discussed above. The ACCC considers that not allowing any cost component for cutover testing would tend to be contrary to Telstra's legitimate interests. On the other hand, allowing cost recovery for cutover testing in respect of all connections would be to allow recovery for cutover testing which was not required under the ACIF code. The ACCC's approach best leads to an amount that meets Telstra's legitimate business interests as it allows cost recovery for all cutover testing that Telstra was required to perform under the ACIF code.
1026. The next matter is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). Access seekers have an interest in being able compete on their merits for end-user customers. It is in ULLS access seekers' interests to pay charges that reflect the efficient forward-looking cost of connecting services. Paying a charge that includes an allocation of costs for cutover testing for all connections would tend to be against those interests. However access seekers' interests should not extend to not having to pay for testing which they have requested Telstra to perform. The ACCC's approach allows for access seekers' interests to be met, but does not afford them gains from cutover testing performed without charge.
1027. The next matter is the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). It is concerned with ensuring that Telstra will be able to recover its costs of performing ULLS connections. The ACCC's approach ensures that Telstra will be able to recover costs of cutover testing where it was required to perform such testing.
1028. The ACCC does not consider that the matters in paragraph 152CR(1)(e) materially contribute to consideration of the appropriate approach taken to cutover testing. In relation to the "operational and technical requirements" matter in paragraph 152CR(1)(f), the ACCC considers that it may be relevant under this matter to have regard to the ACIF code requirements. However it does not appear that cutover testing is "necessary for the safe and reliable operation" of the ULLS, given the agreement to discontinue cutover testing. In relation to paragraph 152CR(1)(g), the ACCC has considered efficiency incentives in its consideration of the LTIE above.
1029. In view of the above matters, the ACCC considers that its approach best ensures that the various matters under section 152CR(1) are taken into account. The ACCC's ULLS pricing principles are silent in relation to cutover testing, but do specify that ULLS connection costs should be TSLRIC+ based and that regard should be had to back-of-house costs. A strict reading of the TSLRIC+ concept would require that no cost recovery be allowed for cutover

testing, as the evidence of all parties is that cutover testing is not necessary for IULLS and TULLS connections. However, the ACCC's approach recognises the ACIF code obligations on Telstra, which required cutover testing to occur where access seekers requested it. The ACCC also considers that its approach best relates the requirement to perform cutover testing to the particular access seekers who requested it, rather than recovering costs across all access seekers. For clarity the ACCC's determination specifies that no cost allowance for cutover testing is to be recovered after 10 October 2007, which Telstra identified as the cessation date for cutover testing with respect to the access seeker parties to the joint arbitration hearing.

1030. Accordingly the ACCC considers it more appropriate that the final determination specifies that the access seeker is liable to pay Telstra for cutover testing when cutover testing was requested for a connection. This approach is appropriate as it relates the recovery for cutover testing to the access seeker behaviour that caused the requirement.
1031. Primus and Chime have submitted that the time allowance for cutover testing activity should be no more than 1.5 minutes. Other access seeker parties have not disputed the [c-i-c] minute allowance for cutover testing activities to take place that was submitted by Telstra. In light of Layer 10's view that such an allowance is credible,⁶³⁴ the ACCC will adopt Telstra's estimate of [c-i-c] minutes for the purposes of these final determinations.

Jumpering, travel, vehicle and tool costs; Materials costs; Indirect costs

1032. The ACCC proposed to the parties in its consultation paper that it would assess efficient jumpering, travel, vehicle and tool costs based upon the third party (3P) contractor rates that Telstra uses for the connection of the ULLS.
1033. The ACCC considered in its consultation paper that Telstra would have IULLS and TULLS single connections performed on two bases, and that the single connection charges should reflect the travel costs of both scenarios:
- 'singular' connections made at exchanges not necessarily close to each other
 - connections made as part of work orders involving multiple tickets of work at one exchange or at exchanges in a close proximity.
1034. The ACCC proposed in its consultation paper to estimate efficient 'singular' ULLS jumpering/travel/vehicle/tool costs by using 'first round' quotes from 3P contractors that were provided by Telstra in response to an ACCC information request.⁶³⁵ Those quotes were provided by 3P contractors after they indicated that PSTN jumpering rates were insufficient to carry out ULLS jumpering.

⁶³⁴ Layer 10, above n 619, p. 42.

⁶³⁵ Telstra, *Telecommunications access disputes: Telstra ULLS access disputes – Direction for the supply of information on third party costs of single ULLS connections*, 8 May 2007, Annexure B.

1035. The ACCC proposed in its consultation paper to estimate efficient ‘multiple’ ULLS jumpering/travel/vehicle/tool costs by using the average of 3P quotes provided by Telstra in August 2005 for ULLS-type jumpering at exchanges in close proximity.
1036. The ACCC proposed in its consultation paper that the cost estimates for ‘singular’ and ‘multiple’ jumpering be averaged to obtain an overall estimate of efficient costs for ULLS single connections. The ACCC proposed to give equal weighting to singular and multiple jumpering quotes for the calculation of metropolitan single connections costs. However, for Band 3 single connections, the ACCC proposed a greater weighting (80 per cent) to the singular jumpering quote to reflect a likely greater dispersion of exchanges in that Band.
1037. The ACCC proposed to adopt the materials cost of copper pairs used to connect points on the main distribution frame (MDF) that Telstra proposed in previous proceedings. The costs proposed were \$[c-i-c] for CBD areas and \$[c-i-c] for other areas.
1038. The ACCC also proposed a mark-up of 10 percent on third party contractor rates to cover indirect costs such as contract management costs, in preference to Telstra’s previously claimed mark-up of [c-i-c] per cent. This reflected the ACCC’s view that when using third party contractors, Telstra will avoid the indirect cost categories that comprise its claimed mark-up. Further, efficiently incurred contract management costs would not represent a significant component of ULLS connection costs.
1039. The ACCC sought the parties’ views on these positions in its consultation paper. The ACCC particularly sought parties’ views on the appropriate weightings for singular and multiple connection charges.
1040. Following the provision of the finalised Layer 10 report on connection charges, the ACCC sought views on certain conclusions reached in that report on which parties had not previously had an opportunity to comment. Relevantly, that report raised concerns about the efficiency of ULLS quotes provided by third party contractors.⁶³⁶ The report noted that the ULLS quotes provided by Telstra significantly exceeded rates for PSTN singular connections (by over [c-i-c]%). The report considered that this did not seem to reflect any realistic estimate of the differences in processes for ULLS connections compared to PSTN connections, particularly in light of the cessation of cutover testing. The report also noted that the ULLS quotes exceeded rates that could be inferred for LSS connections, which did not seem reasonable in light of the extra jumpering work required for LSS connections. The report noted that the number of ULLS connections would be smaller than PSTN or LSS connections, and that 3P contractors might therefore have less incentive to negotiate quotes down to efficient costs. Layer 10 suggested that, following the cessation of cutover testing, it might be appropriate to adopt PSTN connection rates as an efficient benchmark.

⁶³⁶ Layer 10, above n 619, pp. 27-9.

1041. Layer 10 also provided opinion on how de-averaged charges could be derived from geographically averaged charges provided by Telstra.⁶³⁷ In regard to the weightings of singular and multiple connection charges, Layer 10 considered that weightings of 0:100, 30:70 and 80:20 would be appropriate in Bands 1, 2 and 3 respectively.

Parties' submissions on jumpering, travel, vehicle and tool costs; materials costs; indirect costs

Jumpering, travel, vehicle and tool costs

1042. Telstra submits that a geographically averaged \$[c-i-c] should be used to estimate efficient jumpering costs using updated contractor rates and certain weightings of these rates.⁶³⁸ This compares to an estimate of around \$28 in CBD and metropolitan areas, and \$40 in regional areas proposed in the DFDs.
1043. Telstra submits that the ACCC should take consideration of the finalised rates from 1 July 2007, as opposed to the 'first round' rates used in the DFDs.⁶³⁹ The finalised rates supplied by Telstra do not distinguish between metropolitan and regional work. Telstra submits, consistent with its view that overall connection prices should be averaged, that a simple average of the contractor rates be used in all geographic regions. Telstra also submits that updated multiple jumpering rates should be used in preference to the scaled up August 05 rates.
1044. Telstra submits that, in the absence of any better information, it accepts the weightings proposed by the ACCC for metropolitan and country areas.⁶⁴⁰
1045. However, Telstra submits that "using 100% contractor rates to assess Telstra's efficient costs significantly underestimates Telstra's actual costs over time given that historically Telstra has tended to utilise its internal workforce to a large extent".⁶⁴¹
1046. Following from this submission, Telstra also submits that connection charges should not be backdated.⁶⁴² Alternatively, it submits that the ACCC "must have regard to costs that may have applied as at the beginning of any period of backdating".⁶⁴³ As such, Telstra submits that charges based on updated contractor data should not apply to all connections. Rather, Telstra submits that charges should instead reflect the claimed costs of Telstra's own technicians who performed most of these connections. Telstra had set out these claimed costs in Telstra's submissions to the Telstra-Primus connection charges access dispute. Telstra submits that prior to 8 September 2006 ULLS

⁶³⁷ Layer 10, *op cit*, p. 29.

⁶³⁸ Telstra, above n 561, p. 12.

⁶³⁹ Telstra, *op cit*, pp. 14-15.

⁶⁴⁰ Telstra, *op cit*, p. 15.

⁶⁴¹ Telstra, *op cit*, p. 3.

⁶⁴² Telstra, *op cit*, p. 13.

⁶⁴³ Telstra, *op cit*, p. 14.

single connections were carried out solely by Telstra technicians.⁶⁴⁴ It also submits that it now uses approximately [c-i-c]% contractor labour for ULLS jumpering specifically, and [c-i-c]% contractor labour for jumpering work in general.⁶⁴⁵

1047. As a further alternative, Telstra submits that, if backdating was used, its updated 2007 costs, suitably indexed for earlier time periods, should be used.⁶⁴⁶
1048. In their initial submissions, Primus and Chime submit that the ACCC should only use Telstra's lowest 'first round' contractor quotes to estimate efficient jumpering/travel/vehicle/tool costs, rather than an average of all of Telstra's contractor quotes.⁶⁴⁷ Primus and Chime submit that Telstra would most likely discard higher quotations in favour of lower quotes. Optus similarly submits that using an average of rates is conservative and that it is likely that Telstra would face the lowest rate quoted.⁶⁴⁸
1049. Chime considers that the differences between quotes for metropolitan jumpering are difficult to understand, and submits that certain higher quotes would not appear to be efficient.⁶⁴⁹ Primus raises similar concerns, based on analysis by its consultants.⁶⁵⁰ Both parties accept the ACCC's proposed multiple jumpering quotes.
1050. PowerTel and Request submit that they accept the ACCC's proposed approach to jumpering, travel, vehicle and tool costs as set out in the DFDs.⁶⁵¹
1051. In relation to the weighting of singular and multiple jumpering cost estimates, Primus submits that, based on an analysis performed by its consultant, that:⁶⁵²
- all Band 1 connections should be based on multiple jumpering rates alone,
 - an 80 per cent weighting in favour of multiple jumpering is a conservative estimate for Band 2 connections,
 - for Band 3 connections, an 80 per cent weighting in favour of singular jumpering costs is reasonable.
1052. Chime's initial submission contends that the relative weight assigned to singular jumpering costs should be only 10-20 per cent for metropolitan connections. However, it submits that the ACCC's proposed weighting of 80

⁶⁴⁴ Ibid.

⁶⁴⁵ Ibid.

⁶⁴⁶ Ibid.

⁶⁴⁷ Chime, above n 562, pp. 3-4, Primus, above n 562, p. 4.

⁶⁴⁸ Optus, above n 562, [9.1].

⁶⁴⁹ Chime, above n 562, p. 4.

⁶⁵⁰ Primus, above n 562, p. 5.

⁶⁵¹ PowerTel and Request, above n 562, p. 37.

⁶⁵² Primus, above n 562, pp. 5-7; Primus, above n 575, p. 4.

per cent for Band 3 connections is likely to be reasonably accurate.⁶⁵³ Chime's reply submission supports the approach to weightings proposed by Primus.⁶⁵⁴

1053. Optus submits that the weighting of 50 per cent proposed by the ACCC for multiple jumpering costs is improbably low for metropolitan connections. It proposes a weighting of 66 per cent.⁶⁵⁵
1054. In its reply submission, Telstra rejects arguments by access seekers that only the lowest contractor rates be used.⁶⁵⁶ It submits that any variation in contractor rates is reduced in the finalised rates, that any variations are due to the different geographic areas in which the contractors operate, and that some of the higher rates reflect arrangements whereby some contractors apply the same rate for both city and country connections. Telstra submits that to disallow a higher metropolitan rate while accepting the discounted regional rate would prevent Telstra from recovering its direct costs.
1055. Telstra also submits that arguments made by Primus and Chime on the weighting of singular and multiple jumpering rates should be rejected as they use out-of-date data and fail to take into account that connections could be scheduled for either the morning or the afternoon of any given day.⁶⁵⁷
1056. In its reply submission, Optus submits that the updated rates provided by Telstra should be rejected in favour of the lowest contractor rates and de-averaged prices.⁶⁵⁸ Optus also submits that regard should not be had to Telstra's own staff costs, as the appropriate approach is to base costs on an efficient forward-looking cost measure.⁶⁵⁹
1057. In its reply submission, Chime submits that it strongly disagrees with Telstra's submissions about backdating.⁶⁶⁰ Chime submits that backdating is appropriate and that the costs should be based on those of an efficient operator, not on Telstra's actual claimed costs. Primus makes equivalent submissions.⁶⁶¹
1058. Primus and Chime both oppose the use of Telstra's finalised jumpering rates, and reiterate their submissions that Telstra is likely to face the lowest price.⁶⁶²
1059. Following the opportunity to comment on the finalised Layer 10 report, PowerTel and Request adopt all conclusions in the finalised Layer 10 report.⁶⁶³

⁶⁵³ Chime, above n 562, pp. 4-5.

⁶⁵⁴ Chime, above n 576, p. 2.

⁶⁵⁵ Optus, above n 562, [9.3].

⁶⁵⁶ Telstra, above n 596, p. 3.

⁶⁵⁷ Telstra, *op cit*, p. 4.

⁶⁵⁸ Optus, above n 574, [5.12].

⁶⁵⁹ Optus, *op cit*, [5.22].

⁶⁶⁰ Chime, above n 576, pp. 1, 3.

⁶⁶¹ Primus, above n 575, pp. 1, 3-4.

⁶⁶² Chime, above n 576, p. 3; Primus, above n 575, p. 4.

1060. Telstra submits that it would not be appropriate to use PSTN rates as an efficient benchmark for ULLS jumpering activity, as suggested in the finalised Layer 10 report. Telstra submits that contractor rates are negotiated as a bundle across all services, and so any concerns about incentives to negotiate are not justified.⁶⁶⁴ Telstra also submits that, even without cutover testing activity, ULLS connections require more technician time than PSTN connections.⁶⁶⁵ It submits that ULLS connections require manual task notification to the DAC while PSTN connections do not. Telstra submits that certain automated processes for PSTN connections cannot be adopted for IULLS connections because of the existing service on the line. Telstra submits that adopting PSTN rates would not allow Telstra to recover its costs.
1061. Telstra also submits that there is little value in trying to derive a de-averaged rate from averaged rates.⁶⁶⁶
1062. Optus supports Dr Brooks' concerns about the efficiency of ULLS jumpering rates, submitting that it would be appropriate to have regard to the cost of PSTN connections.⁶⁶⁷ However, Optus states that it does not support the Layer 10 approach of uplifting the first round de-averaged rates by the average amount in excess of the averaged rates over the de-averaged rates.⁶⁶⁸
1063. Primus and Chime both also support Dr Brooks' concerns about the ULLS quotes provided by Telstra and submit that the ACCC should have regard to PSTN rates.⁶⁶⁹ Primus and Chime submit also that certain of the quotes provided by Telstra are not efficient given the amount by which they exceed other quotes, and that some higher quotes should be disregarded.⁶⁷⁰
1064. In response to the finalised Layer 10 report's commentary on the weighting of singular and multiple jumpering quotes, Telstra provides information relating to one month of ULLS connections in Band 1, stating that in January 2008, the data indicated that the proportion was [c-i-c]:[c-i-c] singular to multiple jumpering for that Band. Telstra did not provide equivalent information with respect to Band 2 or Band 3.
1065. Primus and Chime submit in regards to the fact that connections could be scheduled for either the morning or afternoon of any given day that the process is only semi-automated.⁶⁷¹ They submit that Telstra has choice as to whether it wants to meet any particular morning or afternoon slot, and that Telstra can effectively determine connection times to suit itself.

⁶⁶³ PowerTel and Request, Powertel Ltd ("Powertel") – Telstra Corporation Ltd ("Telstra"): ULLS Access Dispute, Request Broadband Pty Ltd ("Request") – Telstra: ULLS Access Dispute, 12 February 2008, p. 1.

⁶⁶⁴ Telstra, above n 577, p. 2.

⁶⁶⁵ Ibid.

⁶⁶⁶ Telstra, *op cit*, p. 3.

⁶⁶⁷ Optus, above n 623, p. 1.

⁶⁶⁸ Optus, *op cit*, p. 1-2.

⁶⁶⁹ Primus, above n 625, p. 3; Chime, above n 625, p. 3.

⁶⁷⁰ Primus, *op cit*, p. 1-2; Chime, *op cit*, p. 1-2.

⁶⁷¹ Primus, *op cit*, p. 3-4; Chime, *op cit*, p. 3-4.

Materials

1066. Telstra submits that materials costs are incorporated in the rates it has negotiated with contractors.⁶⁷²
1067. Primus and Chime both submit that they consider it likely that contractor quotes would include materials costs and that this cost element should therefore be excluded from the ACCC's cost model.⁶⁷³
1068. PowerTel, Request and Optus accepted the ACCC's proposed approach to costing materials, although Optus submitted that this approach may overstate prices.⁶⁷⁴

Mark-up for indirect costs

1069. Telstra accepts the 10 per cent mark-up for indirect costs proposed by the ACCC but submits that it does not expressly endorse this methodology.⁶⁷⁵
1070. PowerTel and Request accept the 10 per cent mark-up for indirect costs proposed by the ACCC.⁶⁷⁶ Optus, Primus and Chime submit that the 10 per cent mark-up is more than reasonable.⁶⁷⁷

ACCC's consideration of jumpering, travel, vehicle and tool costs; materials costs; indirect costs

1071. A number of the principles for setting ULLS connection charges are not controversial. It is generally not disputed, for instance, that the charge for connections that are performed for Telstra by contractors should be set by reference to contractors' charges (together with a mark-up for indirect and back-of-house costs).
1072. On some issues, such as the materials costs and the mark-up for indirect costs, the parties are generally in agreement. However the parties have raised a number of points for consideration. The issues raised include:
- the appropriate weighting of singular and multiple jumpering,
 - which contractor charges should be used to proxy efficient costs (including whether averaged quotes or the lowest quotes should be used), and
 - the extent to which contractors have been used by Telstra and whether Telstra's own staff costs should be reflected in backdated prices.

⁶⁷² Telstra, above n 561, p. 21.

⁶⁷³ Chime, above n 562, p. 7, Primus, above n 562, p. 11.

⁶⁷⁴ PowerTel and Request, above n 562, p. 38; Optus, above n 562, [9.7].

⁶⁷⁵ Telstra, above n 561, p. 16.

⁶⁷⁶ PowerTel and Request, above n 562, p. 42.

⁶⁷⁷ Optus, above n 562, p. 23; Chime, above n 576, p. 4; Primus, above n 575, p. 4.

Materials costs and mark-up for indirect costs

1073. The ACCC noted the possibility of double-counting materials costs in its consultation paper. It accordingly sought advice from Telstra in its discussion paper as to whether materials costs were included in contractor charges.
1074. Given Telstra's response that the costs of materials are already included in contractor costs, the ACCC will not include a separate allocation for materials costs in the connection charges to be set in these arbitrations.
1075. With regards to the 10 per cent mark-up for indirect costs, the parties are in general agreement that this is an appropriate mark-up, although some parties submit that this is "more than reasonable".
1076. Given the responses by the parties, the ACCC has maintained the use of the 10 per cent mark-up. The allowance of 10 percent is set by reference to what is considered a reasonable mark-up on contractor charges for efficiently incurred contract management costs. Although there may be some potential for a 10 percent allowance to be "more than reasonable" or above efficient forward-looking costs, at this time the ACCC does not consider that this is a significant risk. Accordingly, it has maintained the 10 percent allowance. This is consistent with the approach adopted by the ACCC in its connection charge undertaking assessments and in specifying the ULLS pricing principles.⁶⁷⁸

Weighting of singular and multiple jumpering charges

1077. No party disputes that certain connections would be made as singular connections, while others would be made as part of multiple jumpering. The parties similarly do not dispute that the weighting used by the ACCC should reflect the weighting for actual connections. However the parties disagree on the value of the appropriate weighting that should apply for singular versus multiple jumpering in Bands 1 and 2. The parties do not disagree in relation to the 80:20 weighting used in Band 3.
1078. The following table summarises the submissions of the parties in response to the ACCC's consultation paper on the appropriate weightings to be used:

⁶⁷⁸ ACCC, above n 560, p. 31; ACCC, *Assessment of Telstra's LSS undertakings relating to connection and disconnection charges – final decision*, April 2006, pp. 27-8; ACCC, above n 586, p. 24.

Proposed singular: multiple weightings for ULLS single connections		
	Band 1	Band 2
ACCC DFDs	50:50	50:50
Telstra	[c-i-c][c-i-c]	
Optus	33:66	33:66
Primus and Chime	0:100	20:80

1079. The finalised Layer 10 report, having considered the parties submissions, considered that it would be appropriate to apply the following weightings in Bands 1, 2 and 3:⁶⁷⁹

	Band 1	Band 2	Band 3
ACCC FDs	0:100	30:70	80:20

1080. The finalised Layer 10 report considered that the analysis presented by Primus and Optus both supported lower weightings than those in the consultation paper being adopted for ‘singular’ connections.⁶⁸⁰ The finalised Layer 10 report considered, in light of the GQAAS analysis presented by Primus about the number of connections made in the various Bands and the submissions raised by Telstra on the ability for connections to occur on the morning or afternoon for any given day, that the above proportions represented Telstra’s likely ability to have work carried out as singular and multiple connections.
1081. Although Telstra initially supported the ACCC’s weightings from the consultation paper, it later submitted, in its submissions on the finalised Layer 10 report, that certain data indicated a [c-i-c] weighting for Band 1 connections in January 2008. Telstra did not submit on Band 2.
1082. In general, it would be more efficient to batch connections together to minimise the travel time necessary for the technicians performing jumpering tasks. Accordingly the ACCC has considered the appropriate proportions to reflect the availability of batching to Telstra.
1083. Telstra submits that the views of access seekers do not account for the fact that connections can be made on either the morning or afternoon of a given day. Telstra also submits that the fact that the GQAAS analysis provided by Primus uses some out of date data means that it should not be used. Telstra does not comment in response to the Optus estimate.

⁶⁷⁹ Layer 10, above n 619, p. 34.

⁶⁸⁰ Layer 10, *op cit*, p. 33.

1084. The ACCC considers that the inputs used in the GQAAS analysis are not likely to have changed significantly over the period since the data was derived.⁶⁸¹ Accordingly, the ACCC considers that it would be appropriate to have regard to Primus' submissions. In relation to Optus' submission, the ACCC notes that that submission relies only on Optus' own connections.
1085. The ACCC considers that the morning and afternoon issue raised by Telstra is a valid point. However the ACCC notes that, even accounting for this, there is still a high average number of connections made per half-day in Band 1 and Band 2. The ACCC also notes that Telstra has some ability to adjust its acceptance of orders for a particular morning or afternoon slot when confirming the date and time for a connection.
1086. Adjusting the GQAAS analysis would estimate that an average of 12 connections are made per half day per exchange in Band 1, and an average of 4.5 connections per half day per exchange in Band 2. These results indicate that a 50-50 weighting is too low. Accordingly the ACCC agrees that the weightings in the Layer 10 report, which take account of the fact that connections can be made on either the morning or afternoon of a given day and are based on data provided over a long period of time, as opposed to one particular month, are appropriate.
1087. The ACCC considers that these better reflect the proportions that are reasonably open to Telstra to achieve, having regard to the number of connections made in each Band and the number of exchanges. While the ACCC recognises that for the particular month of January 2008, Telstra observed some data that indicated a different split for Band 1, the ACCC considers that it is preferable to have regard to proportions that could be achieved across a longer period of time.
1088. Further, the ACCC considers the possible approach to weightings for Band 1 and 2 against the legislative matters in subsection 152CR(1) of the TPA.
1089. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152 AB(7A) and subsection 152AB(8)).
1090. The ACCC considers that prices based on the forward-looking costs of an efficient provider best promote competition. The ACCC's pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which of the possible approaches best estimates efficient forward-looking costs. If charges faced by access seekers exceed forward-looking efficient costs of connecting the ULLS, access seekers would face charges based on costs that Telstra could avoid in the long run. Telstra would

⁶⁸¹ Layer 10, *op cit*, p. 34.

then face lower connection costs than access seekers for equivalent work. This would discourage efficient entry in downstream markets for voice and DSL services.

1091. The ACCC's approach reflects the availability of batching and Telstra's ability to achieve cost efficiencies. The ACCC considers that basing the weightings on the number of connections made over an extended period of time and the number of exchanges in each Band, better estimates efficient forward-looking costs than basing the weightings on proportions actually achieved in a single month which might have had atypical proportions. Using the actual proportions achieved in Band 1 for January 2008 has the potential to understate the efficient amount of batching. This is because Telstra is able to achieve more batching than this, based on the number of connections over time. The ACCC considers that adopting Telstra's submitted proportions would inflate costs for access seekers and inhibit competition between providers on the merits.
1092. The ACCC does not consider that the approach adopted on this issue affects the objective of achieving any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) affected by the decision on this issue.
1093. Turning to the objective of encouraging economic efficiency in the use of or investment in infrastructure, the ACCC firstly considers the efficient use of and investment in infrastructure used to supply the ULLS. The ACCC also considers consequences for efficient use of and investment in the equipment, such as DSLAMs, that are used to supply downstream voice and DSL services.
1094. The ACCC considers that efficient use of and investment in the infrastructure used to supply the ULLS will be encouraged where Telstra is able to recover the efficient, forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. Connection charges above this level for ULLS access seekers would, however, have the effect of discouraging efficient investment in and use of infrastructure used to supply the ULLS. Use of and investment in infrastructure used to supply downstream services would also be likely to be below efficient levels.
1095. The ACCC has considered above the extent to which its approach would reflect the efficient forward-looking cost of making ULLS connections. In particular, using ULLS connection quotes would be more likely to reflect the efficient batching of connections and the ability to batch that is available to Telstra.
1096. The next matter relates to Telstra's legitimate business interests and its investment in the CAN which is used to supply the ULLS (paragraph 152CR(1)(b)). This is related to the matters in section 152AB(6)(b). Telstra's legitimate interests include its ability to recover its costs and make a normal commercial return on capital employed. Setting ULLS connection charges on the basis of Telstra's ability to batch connections in the long run may be contrary to Telstra's legitimate interests if it is unable to achieve that level of batching in reality. However, the ACCC considers that the numbers it has used

reflect the amount of batching that should be reasonably open to Telstra over time. Accordingly, the ACCC's approach is not against Telstra's legitimate interests. The ACCC does not consider that the approach taken on this issue will have a significant effect on Telstra's ability to exploit economies of scale and scope.

1097. The next matter is the interests of all persons with rights to use the ULLS (paragraph 152CR(1)(c)). The ACCC considers that access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits. It is in the interests of ULLS access seekers to pay charges that reflect the efficient, forward-looking cost of connecting services. Paying connection charges that reflect Telstra's actual cost base, particularly when based on the proportion of multiple jumpering for one particular month, would be contrary to those interests, as it would mean access seekers would pay higher charges in excess of forward-looking cost. If charges were based on Telstra's actual cost base, then Telstra would be less likely to seek out jumpering efficiencies open to it, with the result that ULLS access seekers will continue to face excessive charges.
1098. The next matter is the direct cost of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover the costs of making connections.
1099. The ACCC considers that Telstra will likely recover the direct cost of making ULLS connections in the long run regardless of the approach taken on this issue. This will be the case provided that Telstra is able to achieve a balance of singular and multiple jumpering at the level implied by the weightings used by the ACCC. Given the evidence concerning the number of connections and exchanges for each Band, any restriction on Telstra's ability to achieve that balance level of singular and multiple jumpering in connecting the ULLS are not expected to persist.
1100. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The costs of extensions to Telstra's ordering systems necessary to supply the ULLS (and also the LSS) has been taken into account in other charges. The ACCC does not consider that the 'operational and technical requirements' criterion materially contributes to this aspect of the decision.
1101. The last criterion is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has considered these matters above in its consideration of paragraph 152CR(1)(a).
1102. The ACCC considers that, overall, given the above analysis and consideration of the ACCC's ULLS pricing principles, that it will adopt the following weightings:

	Band 1	Band 2	Band 3
ACCC FDs	0:100	30:70	80:20

Appropriate contractor quotes to use

1103. A variety of different contractor quotes have been provided to the ACCC in the course of the arbitrations. The ACCC proposed in its consultation paper to have regard to averaged contractor quotes in setting ULLS connection prices. The quotes used in setting prices for the consultation paper were the following “first round” singular ULLS quotes that were provided by Telstra in May 2007:⁶⁸²

Contractor rates for ULLS singular tickets of work (TOWs) – Run Jumpers ULLS								
Metropolitan			Regional					
\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)

1104. Simple averages of these prices are \$(c-i-c) in metropolitan areas and \$(c-i-c) in regional areas. The ACCC proposed to the parties in its consultation paper to use these figures in its cost model. The ACCC also based its costs for multiple jumpering on quotes provided by Telstra of \$(c-i-c) for 2005-06.
1105. In May 2007, Telstra had also provided PSTN singular jumpering rates agreed for 2006-07, which averaged \$(c-i-c) in metropolitan areas and \$(c-i-c) in regional areas.⁶⁸³ However Telstra also advised that contractors had indicated that PSTN rates were not adequate to cover ULLS work, given the time required to carry out ULLS jumpering, particularly the time required to contact the DAC and access seekers.
1106. In its initial submission in response to the discussion paper, Telstra provided finalised quotes for ULLS singular jumpering in 2007-08, although the revised prices did not distinguish between metropolitan and regional areas:⁶⁸⁴

Contractor rates for ULLS singular TOWs – Run Jumpers ULLS						
\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)	\$(c-i-c)

1107. The simple average of these rates is \$(c-i-c) for singular tickets of work. Telstra also provided updated 2007-08 quotes for multiple ULLS tickets of work which averaged \$(c-i-c).

⁶⁸² Telstra, above n 635, Annexure B.

⁶⁸³ Telstra, *op cit*, Annexure A.

⁶⁸⁴ Telstra, above n 561, pp. 14-15.

1108. Access seekers questioned the ACCC's proposed approach of using simple averages of Telstra's agreed quotes, submitting that it would be likely that Telstra would only face the lowest of the quotes listed.⁶⁸⁵ Based on Telstra's revised quotes, using the lowest of the rates as compared to a simple average would reduce the jumpering cost input by around \$[c-i-c]. Telstra submitted that using a simple average would continue to be appropriate.⁶⁸⁶ Access seekers also questioned the use of the revised quotes, which raised average prices in metropolitan areas, given the absence of separate metropolitan and regional quotes.⁶⁸⁷
1109. In relation to the difference between the first round and finalised rates, the ACCC notes that the simple averages of the two sets of quotes are not significantly different. However the geographically averaged nature of the finalised quotes means that distinguishing between metropolitan and regional areas is not directly possible using the finalised quotes. The ACCC has regard to Telstra's finalised quotes in the following analysis. It considers that having regard to preliminary quotes where finalised quotes exist would not generally be appropriate.
1110. The ACCC considers that the following options have been presented to it on the use of contractor charges:
- using a simple average of ULLS jumpering rates, as proposed in the DFDs
 - using the lowest rate of ULLS jumpering rates
 - use of PSTN rates, for periods where cutover testing does not occur, as suggested by the finalised Layer 10 report.
1111. The ACCC analyses this issue against the legislative matters in section 152CR(1) and the ULLS pricing principles, as required under subsection 152AQA(6) of the TPA.

Paragraph 152CR(1)(a)

1112. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A) and subsection 152AB(8)).
1113. The ACCC considers that prices based on the forward-looking costs of an efficient provider best promote competition. The ACCC's pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is

⁶⁸⁵ Chime, above n 562, pp. 3-4, Primus, above n 562, p. 4; Optus, above n 562, [9.1].

⁶⁸⁶ Telstra, above n 596, p. 3.

⁶⁸⁷ Optus, above n 574, [5.12]; Chime, above n 576, p. 3; Primus, above n 575, p. 4.

relevant to consider which of the possible approaches best estimates efficient forward-looking costs. This in turn requires consideration of which set of costs will most likely reflect the likely costs to Telstra for connection jumpering activity in the long run. If charges faced by access seekers exceed forward-looking efficient costs of connecting the ULLS, access seekers would face charges based on costs that Telstra could avoid in the long run. Telstra would then face lower connection costs than access seekers for equivalent work. This would discourage efficient entry in downstream markets for voice and data services.

1114. The use of ULLS quotes has the potential to overstate efficient costs for connections where no cutover testing occurs. This is because the main reason identified by 3P contractors for PSTN quotes being inadequate was the time taken to contact the DAC as well as the access seekers.⁶⁸⁸ However, where cutover testing does not occur, and having regard to Telstra's advice that it had negotiated to end cutover testing from 10 October 2007,⁶⁸⁹ there is less reason for a large disparity between the time taken for PSTN and ULLS connections due to DAC contact. Relevantly, the contractor quotes were negotiated and finalised before cutover testing was to end. Accordingly, those quotes may exceed efficient costs of ULLS connections where cutover testing is not required. The ACCC expects that ULLS connection quotes for future periods will be revised down as the processes for PSTN connections and ULLS connections more closely align. However the ACCC notes that there may be some other reasons why some disparity between ULLS jumpering times and PSTN jumpering times would remain. It notes Telstra's submission in that regard that states that there is further DAC time needed given that certain automated processes for PSTN connections cannot be adopted for IULLS connections. The ACCC considers that the efficient costs for past ULLS connections would better align with the higher ULLS quotes, reflecting the cutover testing that has occurred.
1115. Telstra has submitted that the quotes for 2007-08 reflect the fact that there has been no cutover testing.⁶⁹⁰ The ACCC considers that this is unlikely. In particular, at the time those quotes were negotiated, cutover testing was still taking place and no arrangements had been reached to cease cutover testing. Accordingly, the ACCC considers that these quotes would not reflect the cessation of cutover testing.
1116. It is also relevant to consider that the ULLS 3P connection quotes appear to exceed implied 3P connection quotes for LSS.⁶⁹¹ This result is counter-intuitive, as LSS connections require more jumpering work than a ULLS connection. This may imply that ULLS connection quotes do not reflect efficient costs. Part of the difference in the past can be attributed to the time speaking with the DAC, where that was not a factor in LSS connections. It may also reflect a lesser imperative for Telstra to negotiate 3P contractors

⁶⁸⁸ Telstra, above n 635, p. 2.

⁶⁸⁹ Telstra, above n 561, p. 17.

⁶⁹⁰ Telstra, above n 577, p. 2.

⁶⁹¹ ACCC, above n 630, p. 103.

down to an efficient price for a smaller amount of ULLS connection work (that Telstra will not have to pay) as compared to LSS connection work (which is completed at the same rates as Telstra ADSL connection work). This may mean that ULLS connection quotes do not reflect efficient ULLS connection costs. The ACCC notes that Telstra submits that its quotes are negotiated as a bundle. However the ACCC considers that the fact that ULLS connections form a relatively small part of the overall bundle means that its concerns are still relevant. Overall, while there may be reasons for efficient ULLS jumpering costs to exceed efficient PSTN jumpering costs, it is more difficult to see why ULLS jumpering costs would exceed LSS jumpering costs.

1117. The use of PSTN rates would more closely reflect expected ongoing efficient ULLS connection costs, but would tend to understate efficient costs for connections which occurred when cutover testing occurred in the past. Relevantly, Telstra itself expected that ULLS connection costs would align with PSTN rates when it commenced using contractors for ULLS connection work. Following the removal of cutover testing this is a more appropriate assumption. However, efficient PSTN connection costs may also differ somewhat from ULLS efficient costs due to reasons other than cutover testing. For example, longer time periods might be required in ULLS connections for interaction with access seekers, where necessary, for fault rectification.
1118. In regards to using the lowest quote compared to using averaged quotes, the ACCC considers that the relevant issue is the extent to which that lowest quote reflects efficient costs generally. Notably, the lowest quote provided by Telstra (\$[c-i-c]) only applies in Melbourne.⁶⁹² However, connections can be required in any geographic region, costs may vary between regions, and not all contractors would operate in all geographic regions. Accordingly the ACCC considers that the data available to it suggests that using only the lowest quote provided may understate the efficient costs of connections in different regions. The next highest quote, which is not exclusive to Melbourne, more closely aligns with the average of the quotes.
1119. The ACCC does not consider that the approach taken to this matter affects the objective of achieving any-to-any connectivity, or that the matters identified in paragraph 152AB(6)(a) are relevant here.
1120. Turning to efficient investment in and use of infrastructure, the ACCC firstly considers the efficient use of and investment in infrastructure used to supply the ULLS. The ACCC also considers consequences for efficient use of and investment in the equipment, such as DSLAMs, that are used to supply downstream voice and data services.
1121. The ACCC considers that efficient use of and investment in the infrastructure used to supply the ULLS will be encouraged where Telstra is able to recover the efficient, forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. Connection charges above this level for ULLS access seekers would, however, have the effect of

⁶⁹² Telstra, above n 561, p. 14.

discouraging efficient investment in and use of infrastructure used to supply the ULLS. Use of and investment in infrastructure used to supply downstream services would also be likely to be below efficient levels.

1122. The ACCC has considered above the extent to which various connection quotes would reflect the efficient forward-looking cost of making ULLS connections. In particular, using ULLS connection quotes would be more likely to reflect efficient costs for past periods when cutover testing was conducted, and less likely to reflect efficient costs when cutover testing is not required. PSTN quotes would be more likely to reflect efficient costs where cutover testing is not required. Averaged quotes would be more likely to reflect efficient costs in different geographic areas than the lowest quote only.
1123. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. Setting ULLS charges on the basis of PSTN quotes, or on only the lowest of ULLS connection quotes, may be contrary to Telstra's legitimate interests if it cannot recover its costs. Relevantly, Telstra has already negotiated and finalised its ULLS connection quotes with 3P contractors for 2007-08 and has paid these amounts for ULLS connections made. To the extent that the ACCC based the ULLS connection charges in the final determination on only the lowest ULLS connection quote or on PSTN connection quotes, Telstra may be unable to recover its costs. While Telstra would have some potential to renegotiate charges for future connections, it would be unable to do this for connections already made. On the other hand, this may not be inappropriate if such costs do not reflect efficient costs. There may also be some reasons, such as the need claimed by Telstra to coordinate disconnection of the previous service, that require excess time for ULLS connections over PSTN connections. To the extent that this was true, using the PSTN quotes might be contrary to Telstra's legitimate interests.
1124. Telstra's legitimate commercial interests also include its ability to exploit economies of scale and scope. The ACCC considers that aligning ULLS connection costs with the PSTN quotes, as opposed to the existing separate ULLS quotes, would improve Telstra's ability to exploit economies of scale and scope. This is because PSTN connections are of a larger number than ULLS connections. If 3P contractors were competing for a larger amount of combined ULLS and PSTN work, it could be expected that those contractors would compete more vigorously and Telstra would be able to obtain lower quotes for connection work. When competing for a relatively smaller number of ULLS connections only, contractors may be less inclined to compete fully in their quoted connection prices.
1125. Similarly, Telstra will better be able to exploit economies of scale and scope to the extent that a lower charge will increase demand for ULLS and downstream services. As there are fixed costs in providing these services, the increased demand will give rise to economies of scale and scope, which Telstra could exploit.
1126. The ACCC has considered above, in its consideration of the efficient use of and investment in infrastructure, the effect of the use of ULLS or PSTN quotes

to set charges on incentives to invest in the infrastructure by which services are supplied. In the long run, under either approach, Telstra should be able to recover its costs plus a normal risk-adjusted return on investment, as ULLS 3P contractor quotes should approach PSTN 3P contractor quotes as the processes for each type of connection become similar. Accordingly, Telstra will have incentives to undertake efficient investments to allow it to supply ULLS and downstream voice and DSL services, having regard to the associated risks.

1127. On the other hand, Telstra's incentives to invest in its ULLS connection processes could be strengthened by using PSTN charges. This is because using such charges would tend to create incentives to invest in processes to achieve ULLS connection work costs more closely aligned with efficient PSTN processes.

Paragraph 152CR(1)(b)

1128. The next matter concerns the legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service (paragraph 152CR(1)(b)). The ACCC's views on the effect of this decision on these issues are discussed as part of the first matter. In particular, in the short run, Telstra's legitimate business interests may not be met by the use of other than an average of ULLS contractor quotes, as it may not be able to recover the amounts that it has paid contractors to perform ULLS connection work. In the longer run, the ACCC expects that the costs of ULLS and PSTN connections should converge, although there may be some reasons for ULLS costs to remain somewhat above those of PSTN connections.

Paragraph 152CR(1)(c)

1129. The third criterion is the interests of all persons who have the right to use the service. (paragraph 152CR(1)(c)). The ACCC considers that access seekers' interests lie in being able to compete for end-users on the basis of their relative merits.
1130. It is in the interest of ULLS access seekers to pay charges that reflect the efficient, forward-looking cost of connecting services. With regards to the future, paying connection charges based on the ULLS connection quotes is contrary to this interest, as they are paying higher charges based on the presence of cutover testing, in excess of forward-looking costs. However, to the extent cutover testing has happened in the past, paying connection charges based on ULLS connection quotes matches with this interest, as cutover testing occurred during that period.

Paragraph 152CR(1)(d)

1131. The fourth criterion is the direct cost of providing access to the declared service. (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover these costs.

1132. The ACCC considers that Telstra will likely recover the direct costs of making ULLS connections in the future under either approach, as the costs of ULLS connections and PSTN connections should converge. However, as noted above in the ACCC's consideration of Telstra's legitimate interests, Telstra may not be able to recover direct costs to the extent that it has already paid contractors for ULLS connection work and incurred higher costs, or to the extent that ULLS connections required some greater time than PSTN connections. However, if these higher charges reflect procedures no longer followed, then using PSTN rates would more appropriately reflect direct costs of making connections.

Paragraphs 152CR(1)(e) & (f)

1133. The next two criteria are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The costs of extensions to Telstra's ordering systems necessary to supply the ULLS (and other equivalent services) have been taken into account in other charges. The ACCC does not consider that the 'operational and technical requirements' criterion materially contributes to this decision.

Paragraph 152CR(1)(g)

1134. The last criterion is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)).
1135. As noted previously, the ACCC considers that should an approach result in ULLS connection charges that are above efficient forward-looking levels, this would impede competition in the provision of downstream (voice and DSL) services. In these circumstances, Telstra would be able to set above-cost prices for its downstream services, leading to a reduction in the consumption of these services below efficient levels, and consequential allocative inefficiencies.

ACCC's conclusion on appropriate contractor quotes to use

1136. As can be seen from the above analysis, a decision on the appropriate contractor quotes to use requires a balancing of competing considerations under the TPA. On the one hand, basing the ULLS connection charge on quotes for PSTN connections are likely to reflect efficient costs for future ULLS connections, and will therefore encourage competition and efficient investment, and reflect the interests of access seekers. However it may be contrary to Telstra's legitimate business interests and its interest in recovering the direct costs of ULLS connections, as it has already paid contractors at the higher ULLS connection quotes. Furthermore, the presence or absence of cutover testing may not be the only reason for a disparity between ULLS and PSTN quotes, and basing charges on PSTN quotes may lead to an estimate below efficient costs.

1137. The ACCC's pricing principles require that connection charges should be set with reference to the amounts charged by third party contractors to Telstra for jumpering work in exchanges.⁶⁹³ They do not specify how those contractor charges should be used to set price.
1138. The ACCC has also had regard to the period of application of these final determinations, which run until 30 June 2008. Telstra's agreed 3P contractor quotes only apply until [c-i-c]. The ACCC notes that, following the cessation of cutover testing, it could be expected that contractor charges negotiated after the expiration of these final determinations will fall, as the time required for contacting the DAC will reduce.
1139. Having regard to the above matters, the ACCC considers that the ULLS connection charges in these final determinations should be set with reference to the 3P connection quotes for ULLS connections rather than PSTN connections. This is because, for the majority of the period covered by the final determinations, cutover testing was occurring, and accordingly the ULLS connection quotes would be likely to be the quotes most equivalent to efficient costs of technician time for that period. For the period of the final determinations where cutover testing is not occurring, the ULLS connection quotes may be less likely to be equivalent to efficient costs. However, cutover testing is not necessarily the only difference between the ULLS and PSTN jumpering procedures, using PSTN charges may be contrary to Telstra's legitimate interests. Accordingly, the ACCC considers that it is being conservative in setting connection charges based on 3P ULLS connection quotes for the period of the FDs.
1140. However, the ACCC notes that, for future periods, if ULLS contractor quotes were not to fall in line with the reduced time needed for ULLS connections, it may be appropriate to reconsider the use of PSTN charges as a proxy for efficient forward-looking costs in any future price determinations.
1141. With respect to using only the lowest quote for ULLS connections as opposed to an average quote, the ACCC considers that using the lowest quote only would disregard potential regional differences in connection costs (and particularly travel times). Using the lowest quote when that quote is only available in one geographic location would tend to understate costs. Accordingly the ACCC proposes to maintain its consultation paper position of taking an average of contractor quotes.
1142. The cost inputs resulting from the ACCC's position are therefore \$[c-i-c] for singular tickets of work in 2007-08, and \$[c-i-c] for multiple ULLS tickets of work in 2007-08. These are weighted for different geographic regions according to the singular/multiple weightings determined above.

Regard which should be had to Telstra's own costs

⁶⁹³ ACCC, above n 586, p. 25.

1143. Telstra submits that the ACCC should have regard to costs that may have applied at the start of any period of backdating.⁶⁹⁴ Telstra specifically submits that the ACCC should have regard to the costs it put forward in the Primus-Telstra ULLS dispute in late 2005. These claimed costs are higher than the costs based on contractor charges.
1144. Essentially, Telstra seeks an increase in the connection charges to reflect a higher claimed cost when Telstra staff performed exchange-based work. Telstra submits that it commenced using contractors for ULLS connections from [c-i-c].⁶⁹⁵ It also submits that it now uses contractors for [c-i-c]% of ULLS jumpering work and [c-i-c]% of all jumpering work.
1145. To accommodate Telstra's submission would require including an increment above costs based on contractor charges. The increment would result from a 'blending' of discrete cost measures associated with (i) Telstra connected services; and (ii) contractor connected services.
1146. The possible approaches open to the ACCC are (i) to base the allowance for cost of exchange-based work for ULLS 'single' connection charges on the cost of contractor-connected services, or (ii) to include an increment of the type that Telstra seeks.
1147. The ACCC has assessed these possible approaches against the subsection 152CR(1) criteria and the ULLS pricing principles, as required under subsection 152AQA(6) of the Act.

Paragraph 152CR(1)(a)

1148. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A) and subsection 152AB(8)).
1149. The ACCC has considered, in particular, the likely effect of each approach on:
- competition in markets for carriage services, and in particular voice and broadband/DSL services;
 - efficient use of and investment in infrastructure by which services are supplied (including the access network, and DSLAMs) or by which services are capable of being supplied (including a fibre to the node (FTTN) network);

⁶⁹⁴ Telstra, above n 561, p. 13.

⁶⁹⁵ Telstra, above n 561, p. 14.

- the legitimate commercial interests of the supplier of the service, including its ability to exploit economies of scale and scope; and
 - incentives for investment in infrastructure, having regard to risks involved.
1150. The ACCC considers that allowing Telstra's increment would lessen competition should it result in the charges faced by access seekers exceeding the forward-looking efficient cost of connecting the ULLS. In that case, access seekers would face charges based on costs that Telstra could avoid in the long run, resulting in access seekers facing a higher cost than Telstra for equivalent work. This would discourage efficient entry in downstream DSL and broadband markets and, to the extent that ULLS providers were also providing voice, in voice markets.
1151. It is therefore relevant to consider whether contractor charges are an appropriate benchmark for the efficient, forward-looking level of the cost categories that underlie those charges. This in turn calls for consideration of whether there are impediments in the long run to both:
- Telstra using contractors exclusively for exchange based work for the ULLS;
 - Telstra being as efficient as that implied by the contractor charges when connecting services itself.
1152. If there are impediments to both of these conditions, then recognising an increase to the connection charges to reflect higher Telstra staff costs may be less likely to harm competition, provided that Telstra and access seekers would each face an equivalent cost base for connections. However, unless both these conditions are met, then recognising the increment would impede competition.
1153. Telstra currently uses contractors for around [c-i-c]% of ULLS single connections, although it uses contractors more widely for ULLS MNM connection work. Over all connections, contractors perform the majority of Telstra's jumpering work. While historically and currently contractors do not perform all ULLS connections, the ACCC considers it reasonable to expect that over time Telstra would be able to use contractors to a greater extent. For instance, as competing service providers complete network migrations to LSS and/or ULLS platforms, existing contractor capacity will be able to be directed towards a greater number of 'single' connections.
1154. The ACCC also considers that the level of cost Telstra incurs when connecting services will closely approach the levels implied by the contractor charges. Given that contractors are recovering their incremental costs (such as labour, travel and materials) and a contribution towards overheads and profit from their charges, it is not apparent why Telstra could not also achieve this level of costs when connecting the ULLS itself.
1155. Telstra's claimed amounts for the costs it incurs when Telstra staff connects services is its actual, current costs. The ACCC does not consider that this

claim represents a measure of Telstra's forward-looking efficient cost for these connections, and is certainly not the best available measure of the efficient, forward-looking cost of those connections. The ACCC has taken this position consistently, both in its setting of interim determinations and in its assessment of Telstra's ULLS connection charge undertaking.⁶⁹⁶

1156. The ACCC does not consider that the approach taken to this matter affects the objective of achieving any-to-any connectivity, or that the matters identified in paragraph 152AB(6)(a) are relevant here.
1157. Turning to efficient investment in and use of infrastructure, the ACCC firstly considers efficient use of and investment in infrastructure used to supply the ULLS. The ACCC also considers consequences for efficient use of, and investment in, the DSLAM infrastructure used to supply downstream DSL services and the infrastructure that could be utilised to provide downstream voice services.
1158. The ACCC considers that efficient use and investment will be encouraged where Telstra is able to recover the efficient, forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. Connection charges above this level for ULLS access seekers would, however, have the effect of discouraging efficient investment in and use of infrastructure used to supply the ULLS. Use of and investment in infrastructure to supply downstream services would also be likely to be below efficient levels as a result.
1159. Also relevant here is the preceding discussion of whether, in the long run, there are impediments to Telstra meeting the efficiency benchmark implied by contractor charges for ULLS connections. As discussed above, it is unclear whether such impediments currently exist, but if they do, the ACCC considers that they will not persist. This does not mean that Telstra will be required to always use contractors to perform ULLS jumpering work. Where Telstra uses its own staff for this work, the ACCC considers that Telstra will be able to realise efficiencies to the same extent as contractors have been able to achieve. Accordingly, the ACCC considers that contractor charges provide an efficient benchmark for underlying cost categories for all ULLS connections, and not just those performed by contractors. It follows that including an increment as sought by Telstra would discourage efficient use of and investment in infrastructure.
1160. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. Setting ULLS connection charges on contractor charges without an increment for Telstra's own costs could be contrary to Telstra's legitimate interests should it prevent Telstra from recovering its costs. This will be more so where Telstra is not able to attain a cost base for ULLS connections at levels commensurate with those charges, or it takes longer to achieve that level of costs. However as discussed above, the ACCC considers that Telstra would be able to attain such a cost base.

⁶⁹⁶ ACCC, above n 560, p. 31.

1161. Telstra's legitimate commercial interests also include its ability to exploit economies of scale and scope. The ACCC considers that not increasing connection charges to cover Telstra's claimed own costs would increase Telstra's ability to exploit such economies. Promoting competition by not including the extra increment would increase demand for ULLS and downstream voice and ADSL services supplied over the ULLS. As there are fixed costs in producing ULLS and these downstream services, the increase in demand will give rise to economies of scale and scope. Telstra remains able to exploit the economies of scale and scope generated in the course of producing these services.
1162. The ACCC does not consider that the decision on whether to include an increment for Telstra's claimed own costs will have a strong bearing on incentives to invest in the infrastructure by which services are supplied. This is because in the long run under either approach Telstra will be able to recover its costs plus a normal risk-adjusted return on investment. Telstra would accordingly have incentives to undertake efficient investments to allow it to supply the ULLS and downstream services, having regard to the associated risks.
1163. However, Telstra's incentives to invest in its connection processes could be strengthened by not including an increment for Telstra's claimed own costs. This is because including such an increment would tend to reduce incentives to invest in processes necessary to realise the cost levels that contractors have already achieved.

Paragraph 152CR(1)(b)

1164. The next matter concerns the legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service. (paragraph 152CR(1)(b)). The ACCC's views on the effect of this decision on these matters have already been discussed as part of the matter concerning the LTIE. The ACCC considers that in the short run, Telstra's legitimate business interests may not be met to the extent that not including an increment for Telstra's claimed own costs would mean Telstra could not recover the costs of connecting the ULLS. However, in the long run, the ACCC considers that either approach will meet these considerations, as Telstra will be able to reduce its cost base to the levels already achieved by contractors.

Paragraph 152CR(1)(c)

1165. The third matter is the interests of all persons who have the right to use the service. (paragraph 152CR(1)(c)). The ACCC considers that access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits.
1166. It is in the interest of ULLS access seekers to pay charges that reflect the efficient, forward-looking cost of connecting services. Paying connection charges that reflect Telstra's actual cost base is contrary to this interest, as it

would mean access seekers would pay higher charges in excess of forward-looking cost. If charges were based on Telstra's actual cost base, then Telstra will be less likely to seek out cost reductions that are open to it, with the result that ULLS access seekers will continue to face excessive charges.

Paragraph 152CR(1)(d)

1167. The fourth matter is the direct cost of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover these costs.
1168. The ACCC considers that Telstra will likely recover the direct cost of making ULLS connections in the long run regardless of the approach taken to this issue. This will be the case provided that Telstra is able to reduce its cost base to the level implied by contractor charges, such as by increasing its use of contractors for ULLS 'single' connections and disconnections or by achieving cost savings when using its own staff. Given that contractors have already achieved these efficiencies, any restriction on Telstra's ability to recover its actual costs incurred in connecting the ULLS are not expected to persist.

Paragraphs 152CR(1)(e) & (f)

1169. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The cost of extensions to Telstra's ordering systems necessary to supply the ULLS (and also the LSS) have been taken into account in other charges. The ACCC does not consider that the 'operational and technical requirements' matter materially contributes to this decision.

Paragraph 152CR(1)(g)

1170. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)).
1171. As noted previously, the ACCC considers that should an approach result in ULLS connection charges that are above efficient forward-looking levels, this would impede competition in the provision of downstream voice and DSL services. In these circumstances, were Telstra's higher claimed own costs to be recognised, this would allow Telstra to set above-cost prices for its downstream services. These above cost prices would encourage a reduction in the consumption of these services below efficient levels, and consequential allocative inefficiencies.

ACCC's conclusion on whether regard should be had to Telstra's own costs

1172. It follows from the above analysis that whether ULLS connection charges should be based solely on costs incurred when contractors connect the service, or whether an increment should be included to reflect Telstra's claimed own

costs, calls for a weighing up of competing considerations in section 152CR(1).

1173. On the one hand, not including this increment may be contrary to Telstra's legitimate commercial and business interests to recover the costs it currently incurs in making ULLS connections, including the recovery of direct costs of connecting services. Any such impediment that may currently exist will, however, reduce as Telstra realises a more efficient cost base for making connections, to the levels that contractors have already achieved.
1174. Turning to the remaining matters, the long term interests of end-users (including the promotion of competition, efficiency in the use of and investment in infrastructure, and the ability to exploit economies of scale and scope), and the interests of persons with rights to use the declared service, will be promoted by basing ULLS connection charges based on contractor costs only, and not including any increment for Telstra's claimed own costs.
1175. Similarly, efficiency in use of carriage services and facilities used to provide them will also be encouraged by this approach, as it provides stronger incentives for Telstra to seek out and adopt the more efficient processes that have been employed to date by contractors. This could be by replicating the contractors' business models, or using contractors more.
1176. The ULLS pricing principles state that ULLS connection charges are to be determined by having regard to contractor charges. Accordingly the pricing principles do not support including an increment to reflect Telstra's claimed own costs. Furthermore, the pricing principles require TSLRIC+ pricing, and hence only support including efficient, forward-looking costs. The ACCC considers that contractor charges better reflect efficient, forward-looking costs than Telstra's claimed own staff costs.
1177. Having regard to the matters discussed above, the ACCC considers that ULLS 'single' connection charges should not include the increment as sought by Telstra. This is because those factors supporting the inclusion of the increment would not persist, while including the increment would discourage efficiency and impede competition over the long term. Further, the inclusion of the increment is contrary to the ULLS pricing principles.

ACCC's conclusion on ULLS single connection charges

1178. Given the ACCC's position above in relation to back-of-house costs and jumpering and related charges, the ACCC's ULLS single connection charges for the purpose of these final determinations are:

IULLS and TULLS

	<i>Band 1</i>	<i>Band 2</i>	<i>Band 3</i>
<i>2004-05</i>	\$38.10	\$43.10	\$51.50

2005-06	\$38.10	\$43.10	\$51.50
2006-07	\$44	\$47.80	\$54.10
2007-08	\$50.10	\$52.80	\$57.40

1179. As noted by the ACCC earlier in these reasons, the level of prices resulting from the ACCC's approach appears high, and in particular leads to a counterintuitive result that ULLS connection prices significantly exceed LSS connection prices. However, as noted above, the ACCC would expect that these ULLS connection prices will fall in later periods following the cessation of cutover testing and subsequent expected reduction of contractor rates. The ACCC notes in particular that jumpering quotes should in due course at least fall below the costs for LSS connections and should approach costs of PSTN connections.
1180. Where an access seeker requested cutover testing, and where that cutover testing was performed by Telstra, an additional amount is allowed for cutover testing to take place:

IULLS and TULLS—cutover testing allowance

	<i>All bands</i>
2004-05	\$10
2005-06	\$10
2006-07	\$10.40
2007-08 (until 10 October 2007)	\$10.80

4.2.8 Assessment of efficient costs - disconnections

1181. As noted above, Telstra has not previously charged a separate ULLS disconnection charge. However, in past undertaking processes, and in the course of arbitrating access disputes, Telstra has submitted that there should be an allowance within the ULLS connection charge for disconnection jumpering activity.⁶⁹⁷ The allowance sought by Telstra reflected Telstra's view that physical ULLS jumpering disconnection activity need not occur at the time of the ULLS disconnection, but rather at some later time.⁶⁹⁸
1182. Consistent with the ACCC's views in its assessment of Telstra's ULLS connection charge undertaking,⁶⁹⁹ the ACCC proposed in its consultation

⁶⁹⁷ Telstra, *Telstra's submission in support of the ULLS connection charges undertaking dated 13 December 2004*, March 2005, p. 2.

⁶⁹⁸ Telstra, *op cit*, Annexure B, p. 3.

⁶⁹⁹ ACCC, above n 560, pp. 50-51.

paper that there should not be an allowance for disconnection costs in the ULLS connection charge.

1183. The ACCC's position was informed by the view that ULLS disconnection jumpering and back-of-house activity could be expected to be subsumed in a re-connection process, such as that of a new ULLS or PSTN connection, and undertaken as a secondary activity to such a connection.⁷⁰⁰ The ACCC further stated in its consultation paper that it would accept the advice of Consultel to the effect that there was not a risk of an access seeker continuing to use a disconnected ULLS that was still physically connected.⁷⁰¹
1184. Accordingly, the ACCC proposed in its consultation paper that no cost allowance be included for disconnections in the ULLS connection charge.

Parties' submissions on disconnection charges

1185. Primus, Chime, PowerTel and Request agree with the ACCC's proposed approach to ULLS disconnections.⁷⁰²
1186. Optus submits in its initial submission that, in many instances, costs of disconnections would be minimal since they would be associated with the re-connection of a service to another provider.⁷⁰³ It submits that, to the extent Telstra incurs disconnection costs, they should be recovered through a separate charge.⁷⁰⁴
1187. Telstra firstly submits in its initial submission that it is essential that a jumper be physically removed once a request for ULLS cancellation is received, to prevent access seekers using the ULLS without charge.⁷⁰⁵ It submits that it should be entitled to protect itself from such a scenario.
1188. Telstra also submits that there are other reasons why a ULLS jumper could not be left in place pending its removal in the context of a re-connection process. These reasons include:⁷⁰⁶
- taking up space on the access seeker's equipment in the exchange and potential damage to that equipment;
 - potential interference with Telstra equipment from access seeker battery voltage;
 - potential confusion for technicians performing reconnection work; and

⁷⁰⁰ Ibid.

⁷⁰¹ Consultel, above n 588, p. 45.

⁷⁰² Primus, above n 562, p. 12; Chime, above n 562, p.7; PowerTel and Request, above n 562, p.38.

⁷⁰³ Optus, above n 562, [10.8].

⁷⁰⁴ Optus, above n 562, [10.9].

⁷⁰⁵ Telstra, above n 561, p. 21.

⁷⁰⁶ Telstra, *op cit*, p. 22.

- potential long delays in re-use of particular ports leading to build-up of jumpers on a main distribution frame (MDF).
1189. Telstra accordingly argues that it would not be sound engineering and business practice to leave the jumper in place. It submits that the legislative matters in section 152CR(1) of the TPA support a separate disconnection charge. Telstra presents a consultant's report by Evans and Peck to support its arguments.⁷⁰⁷
1190. Telstra submits that it should be able to levy a separate disconnection charge of \$[c-i-c], based on costs of removing the jumper and the back of house costs incurred to generate a ToW to schedule the physical disconnection work and [c-i-c] minutes of DAC time.⁷⁰⁸ Telstra submits that a backdated disconnection charge should apply for the same period that any connection charges are backdated.⁷⁰⁹
1191. Primus and Chime, in their reply submissions, repeat that it would not be efficient to remove the ULLS jumper upon every ULLS disconnection, given that disconnections would typically occur upon reconnections to another provider.⁷¹⁰ Both parties also reject Telstra's contention that an access seeker would continue to use a ULLS prior to the jumper's removal, as this would involve unjustifiable commercial risk and breaching access agreements.⁷¹¹ Both parties submit that concerns about overcrowding of exchanges are unwarranted, as a redundant jumper would not take up *additional* space as the space it occupied had already been provided for in the original supply of the ULLS.⁷¹² They submit that if jumpers needed to be removed they could be removed at some later time.
1192. Optus submits in its reply submission that disconnection costs should not be included in ULLS connection charges and that in its view disconnection charges are not within the scope of the dispute.⁷¹³ It reiterates its views about disconnection charges being subsumed into connection fees for a subsequent service.
1193. Telstra submits in response to Optus that it does not consider that Optus' arguments that a separate review should be held for disconnection costs are valid, given that Telstra has previously sought a cost component for disconnections within ULLS connection charges.⁷¹⁴

⁷⁰⁷ Evans and Peck, *Independent report on Telstra's ULLS disconnection and transfer*, 16 August 2007.

⁷⁰⁸ Telstra, above n 561, p. 23.

⁷⁰⁹ Telstra, *op cit*, pp. 7, 24.

⁷¹⁰ Primus, above n 575, p. 7; Chime, above n 576, p. 6.

⁷¹¹ Primus, *op cit*, p. 7; Chime, *op cit*, p. 7.

⁷¹² Primus, *op cit*, p. 8; Chime, *op cit*, p. 7.

⁷¹³ Optus, above n 562, p. 31.

⁷¹⁴ Telstra, above n 596, p.6.

1194. In its submission concerning the ULLS pricing principles, Telstra stated that the failure of the pricing principles to discuss disconnections was an “odd omission” but did not provide any further substantive comments.⁷¹⁵
1195. Following the opportunity to make submissions on the finalised Layer 10 report, the parties provided some further submissions. Relevantly, the finalised Layer 10 report proposed that no costs should be allowed for removal of jumpers on disconnection, and concluded that the reasons identified by Telstra in its initial submission for requiring physical disconnection were not valid concerns.⁷¹⁶ However the report considered that it may be appropriate to levy a \$5 charge for ULLS disconnections under the ULLS Handback mechanism.⁷¹⁷ The Layer 10 report explained that this process would be used where the ULLS was cancelled rather than transferred to Telstra or another service provider. The \$5 amount was only to recover certain back-of-house costs, although the Layer 10 report considered that those costs would not be efficient costs.
1196. In response, Telstra reiterated its view that removal of the redundant ULLS jumper is necessary.⁷¹⁸ Telstra submitted that the potential for faults on access seekers’ equipment would cause damage to end-users if it occurred. It also submitted that leaving jumpers in place would be confusing for technicians, contrary to the conclusions in the Layer 10 report, as it is not possible to mark an access seeker point of interconnect (POI) as “disconnected” for a long period of time.
1197. Optus reiterates that it considers no disconnection charges should be levied, but considers that if any charge was to be levied, it should be limited only to disconnections stemming from a ULLS Handback procedure.⁷¹⁹ Optus also submits that any charge should not be incorporated into connection charges but rather charged separately.
1198. Primus and Chime submit that they agree with the conclusion in the Layer 10 report that physical disconnection of the ULLS jumpers is not necessary.⁷²⁰ They submit that they agree with the conclusion that manual interaction in Telstra’s back-of-house processes is not efficient. Both parties submit that, even if a ULLS Handback charge is allowed, it should be allowed only for a limited time until systems processes are made, only allowed after a 30 day standby period and only for 2 minutes of activity.⁷²¹

ACCC’s views on disconnection charges

⁷¹⁵ Telstra, above n 565, p. 10.

⁷¹⁶ Layer 10, above n 619, pp. 53-4.

⁷¹⁷ Layer 10, *op cit*, p. 55.

⁷¹⁸ Telstra, above n 577, p. 4.

⁷¹⁹ Optus, above n 623, p. 2.

⁷²⁰ Primus, above n 625, p. 5; Chime, above n 625, p. 5.

⁷²¹ Primus, *op cit*, p. 5-6; Chime, *op cit*, p. 5-6.

1199. Firstly, the ACCC does not consider that Optus' argument that disconnection costs should not be considered in these disputes is correct. As Telstra has claimed disconnection costs as part of ULLS connection charges in the past, disconnection issues are relevant for consideration in these arbitrations.
1200. It is common ground between all parties that ULLS jumpers can be left in place for some time following the disconnection of the ULLS. The disagreement between the parties largely relates to whether those jumpers must be separately disconnected before a new service is connected (either on that ULLS or on the equipment port to which the ULLS is connected) and the timing of any separate disconnection.
1201. The ACCC also notes that IULLS and TULLS quotes involve a cost component for disconnection activity to take place. Telstra submits that a reason for the ULLS connection quotes it has provided exceeding PSTN connection quotes is an allowance for disconnection of the previous service to take place before the IULLS service is connected.⁷²²
1202. Where a ULLS disconnection takes place as a result of an end-user churning their downstream services to another service provider, there is the potential for the removal of the existing jumpers to be combined with installing the new jumpers on the relevant line. Overall costs can be significantly reduced by combining the two processes and the costs of removing the jumpers would be subsumed into the relevant connection charge.
1203. Accordingly, it is relevant to consider whether such an aligned 'churn process' could be considered efficient. Telstra has implemented churn processes in other contexts, including churn processes for DSL services and more recently for LSS and DSL services.⁷²³ Under the LSS/DSL transfer process, services can be churned from one service provider to another upon the gaining service provider submitting an order. Participating service providers give a standing authority to transfer services they lose. The process is unavailable unless both the gaining service provider and losing service provider have agreed to participate. Where this process is used to transfer the service, Telstra does not apply a disconnection charge. This process appears consistent with the DSL churn process.
1204. No equivalent process exists for the ULLS. Rather, existing disconnections and connections are costed by Telstra on the basis that a ULLS is disconnected, and the new service then separately connected. The ACCC in its consultation paper proposed a zero disconnection cost component and setting charges on the basis that an efficient provider would not disconnect jumpers separately and that disconnection costs could be subsumed into reconnection costs.

⁷²² Telstra, above n 577, p. 2.

⁷²³ DSL Transfer and DSL/SSS Transfer process participants, 23 January 2008, accessed 2 February 2008, at www.telstrawholesale.com

1205. Telstra argues that a [c-i-c] disconnection charge should be levied in all cases. Telstra provides some new arguments in support of its position. Access seekers support the ACCC's position in its consultation paper.
1206. Not all ULLS disconnections would take place in response to a customer transfer of downstream services. In some cases a ULLS would be disconnected and no new service would be immediately connected for that end-user.
1207. In such a situation it is relevant to note that Telstra considers that ULLS disconnection jumpering work need not take place immediately (although it does submit that it should be relatively soon after disconnection). Rather, Telstra has consistently submitted that the removal of jumpers may be deferred for some time and accordingly does not allocate any travel time to cost claims for disconnections.⁷²⁴ This can be contrasted, for example, to Telstra's submissions concerning the LSS.⁷²⁵ Accordingly the relevant question is whether such jumpers need to be removed after some period of time, or whether removal can wait until such time as either a new service is connected for that end-user or the equipment-side port is reconnected.
1208. Telstra makes a number of submissions as to why a separate disconnection is necessary. In regards to access seekers using the ULLS without permission, the ACCC does not consider this to be a valid concern. As noted by access seekers, this would not be permitted under access agreements. Furthermore, the ACCC continues to consider that this would not occur because any faults could not be notified or rectified, and the jumper could be disconnected physically at any time. The ACCC considers that access seekers would not seek to use the disconnected ULLS given these considerations.
1209. After reviewing the Telstra submissions supported by the Sankey statement, the responses of access seekers and the finalised Layer 10 report, the ACCC considers that the issues raised by Telstra are in the large not valid reasons why the ULLS jumper must be disconnected in a separate process. In relation to Telstra's submission that the jumper takes up space on access seeker equipment and that that equipment could be damaged, the ACCC notes that Telstra itself regards the risk as "not common".⁷²⁶ The ACCC notes that access seekers, who would be the parties that need to manage this issue, do not regard this issue as a concern, and hence the ACCC considers that this is unlikely to be a significant risk. The ACCC also considers that if the access seeker required more space, it could simply arrange for the connection of a new service on the unused port.
1210. In regards to the battery voltage interference issue, the ACCC notes that this would not be a risk given that the jumpering for a ULLS means that the LI/EN is not connected to the access seeker equipment.⁷²⁷ Telstra's submission on the finalised Layer 10 report agrees that this would only be a risk for the LSS and

⁷²⁴ Telstra, above n 561, p. 23; Telstra, above n 697, Annexure B, p. 3.

⁷²⁵ Telstra, above n 697, p. 5.

⁷²⁶ Telstra, above n 561, p. 22.

⁷²⁷ Layer 10, above n 619, p. 53.

is not applicable to the ULLS.⁷²⁸ Similarly, Telstra's staff member Sankey later considered that this was not applicable to the ULLS.⁷²⁹

1211. In relation to potential confusion for technicians, the ACCC notes that disconnecting a jumper or jumpers to reconnect a new service is a standard process for Telstra technicians and for third party contractors. The ACCC considers that confusion should not arise from a jumper being in place if that jumper is marked as "disconnected". However, Telstra submits that the "disconnected" status is only used temporarily for access seekers' POIs, and that the only possible long term state for an access seeker POI is "vacant". The ACCC notes that this limitation does not extend to jumpers for Telstra's own services, which Telstra's consultant submits can be marked as "disconnected" when jumpers are left in place.⁷³⁰ Telstra submits that confusion could arise from a jumper being in place but the access seekers' POI being marked as "vacant". It submits that the technician would need to call the DAC to resolve this confusion, leading to higher costs.
1212. The ACCC considers that there may be some potential for confusion. However it notes that calling the DAC would be unlikely to resolve the issue. This is because the details of the access seeker POI to use come from the access seeker. Accordingly both the DAC and technician would need to rely on the submitted information and to trust that the access seeker POI was correctly identified. Accordingly there would appear to be little likelihood of the extra costs identified by Telstra being incurred. This issue would also provide incentives to access seekers to provide accurate information to Telstra.
1213. As noted above, no party disagrees that a ULLS jumper can be left in place for some time following the disconnection of the ULLS service. However, the issue is the amount of time that the jumper can be left in place. Telstra, citing the Sankey statement, submits that jumpering work may not take place for that customer for months or years. Telstra submits that this would lead to a build-up of redundant jumpers on the MDF and would be an inefficient approach to managing the MDF.⁷³¹ There would be some build-up of disconnected lines for the reasons outlined by Sankey, and this may lead to inefficiencies in MDF management. This would only apply in circumstances where a service was cancelled entirely rather than churned. However, the ACCC notes that disconnection of the jumper would actually occur in two scenarios – where the customer requested a new service and where the equipment port on the access seeker's equipment was used. Accordingly the timing of re-use of the C-pair port is not the only relevant factor. The ACCC also notes that Telstra does not physically remove jumpers when its own PSTN service is disconnected – rather it leaves the physical jumper in place and is then able to connect services without jumpering. The ULLS staying in place would not lead to any more jumpers being in place in the MDF than under Telstra's own approach to MDF management.

⁷²⁸ Telstra, above n 577, p. 5-6.

⁷²⁹ Sankey, Craig, *Further supplementary statement of Craig John Sankey*, 26 February 2008.

⁷³⁰ Evans and Peck, above n 707, p. 6.

⁷³¹ Telstra, above n 561, pp. 22-3.

1214. The question of back-of-house costs for ULLS disconnections is also relevant. The finalised Layer 10 report considers that it may be appropriate to charge a \$5 fee for back-of-house activity relating to a ULLS Handback. The finalised Layer 10 report considers that back-of-house disconnection activity should be automated and that manual updating of data is not efficient.⁷³² However it considers that some allowance might be made for manual processing on the basis that there has not been a significant amount of ULLS disconnections to date.
1215. Given the above considerations, the ACCC notes that there are a number of potential approaches to disconnection charges:
- charge for jumpering work to physically remove jumpers for every ULLS disconnection, as proposed by Telstra;
 - do not allow charging for disconnection work, as proposed by the ACCC in its DFDs;
 - allow charging for disconnections only in certain limited circumstances, such as for ULLS Handback disconnections only.
1216. The ACCC has considered these approaches against the matters listed in subsection 152CR(1) of the TPA and the ULLS pricing principles, as required under subsection 152AQA(6) of the TPA.

Paragraph 152CR(1)(a)

1217. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
1218. The ACCC considers that prices based on the forward looking costs of an efficient provider best promote competition. The ACCC's pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which approach best estimates efficient forward-looking costs. If charges faced by access seekers exceed forward-looking efficient costs of disconnecting the ULLS, access seekers would face charges based on costs that Telstra could avoid in the long run.
1219. The ACCC considers that the current two-step procedure required by Telstra includes inefficient costs. The two-step procedure requires the removal of a jumper as a separate process, before reconnection of a separate jumper and service. This occurs irrespective of the reason for disconnecting the ULLS. The ACCC considers that this introduces costs of a second jumpering activity

⁷³² Layer 10, above n 619, p. 55.

that could be avoided by the alignment of disconnection and connection processes whenever the churn of an end-user customer to another provider causes the ULLS disconnection. In relation to disconnections which do not result from churn but simply from the cessation of an end-user customer's service, the ACCC considers that the jumper could be left in place until either the C-pair port or equipment-side port is re-used, for the reasons noted above at paragraph 1209 onwards. The ACCC accordingly does not consider it necessary to implement an approach that charges for disconnections for such a scenario. The ACCC accordingly considers that the two-stage process used by Telstra leads to access seekers paying for costs that could be avoided if Telstra implemented an efficient churn and disconnection process, and this process inhibits access seekers' ability to compete.

1220. Notably, as Telstra does not remove jumpers itself when its own PSTN services are disconnected, Telstra would face lower costs than access seekers when an end-user cancels a service. This would discourage efficient entry in downstream markets for voice and DSL services as access seekers would have to either absorb or pass on an additional cost that Telstra does not incur.
1221. The ACCC does not consider that the approach taken to this matter affects the objective of achieving any-to-any connectivity.
1222. Consideration of the economically efficient use of and investment in infrastructure requires consideration of both Telstra's infrastructure and the infrastructure of ULLS access seekers. The ACCC considers that obstacles to acquiring end-user customers, which would exist in the absence of an effective ULLS churn process, would tend to discourage efficient access seekers' use of and investment in infrastructure used to supply voice and DSL services. The higher cost process would discourage ULLS take-up and discourage the use of Telstra's ordering systems used in providing the ULLS.
1223. The ACCC considers that the efficient use of and investment in infrastructure will be encouraged where Telstra is able to recover the efficient, forward-looking cost of making ULLS disconnections, including a normal risk-adjusted return on capital employed. The ACCC does not consider that the two-stage disconnection/re-connection process (and resultant higher cost) represents an efficient, forward-looking approach to (or cost of) making ULLS disconnections. Notably, the approach represents a higher level of costs that would not be incurred if a churn process (such as that for DSL/LSS disconnections and connections) was in place. Allowance of a charge for disconnections in all cases will discourage Telstra's investment in efficient connection and disconnection processes, such as a useful and efficient ULLS churn process.
1224. As noted above, certain ULLS will be disconnected other than as a result of churn. Accordingly, not allowing for a separate disconnection charge has been argued to result in inefficiencies in the use of the CAN to the extent that redundant jumpers lead to overcrowding of the MDF. Accordingly the ACCC has considered whether it would be appropriate to allow a disconnection charge that would only be incurred when a service was cancelled as opposed to disconnections stemming from customer churn. However, given that:

- a disconnected ULLS where jumpers are not removed constitutes no more jumpers than the scenario where a Telstra PSTN service was disconnected;
- all parties agree that removal of the jumper can be deferred; and
- removal would occur at some later stage

overcrowding will be limited and transitory if no separate disconnection charge is allowed.

1225. The ACCC notes Telstra's submissions concerning potential technician confusion due to access seeker POIs being marked as vacant. There may be some potential for confusion and hence inefficiencies in connection processes but the ACCC considers that this would be limited. Any such confusion would be limited to ULLS disconnections not stemming from customer churn. The ACCC also considers that, as noted above, there would be little benefit in calling the DAC and that increased costs should therefore not result. The ACCC also considers that this issue would create incentives for efficient record-keeping by access seekers in order to ensure disconnections were made to the correct access seeker POI.
1226. In relation to the matters identified in paragraph 152AB(6)(a), the ACCC considers that an efficient churn and disconnection process is and has been possible for Telstra to implement, as evidenced by Telstra implementing such a process for DSL and the LSS.
1227. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. The ACCC considers that this interest extends to Telstra recovering its efficient costs, and not to the costs of inefficient disconnection processes. Accordingly a separate disconnection charge is not needed to reflect Telstra's legitimate commercial interests. Disallowing a disconnection cost will encourage Telstra to adopt efficient connection and disconnection processes, which is in its legitimate commercial interests. Also relevant in this context is Telstra's legitimate commercial interest in running an efficient network and in appropriately recovering the costs of services supplied. As noted above, the ACCC considers that access seekers will not use a ULLS that has been disconnected but where jumpers have not been removed. Furthermore, the ACCC considers that not allowing a disconnection charge will not lead to ongoing inefficiencies in the management of the MDF. Any inefficiency would be minor and transitory only. Similarly, confusion for technicians due to jumpers remaining in place should be limited.
1228. The ACCC's proposed approach will also encourage efficiencies in the allocation of technician time to jumpering tasks, and reduce the time spent performing extra and unnecessary jumpering work. These efficiencies would be in Telstra's legitimate commercial interests.
1229. Telstra's legitimate commercial interests also include its ability to exploit economies of scale and scope. The ACCC does not consider that this matter contributes significantly to the consideration of disconnection costs. However

it notes that, in the presence of fixed costs of supplying the ULLS and downstream voice and DSL, Telstra will be able to exploit economies of scale and scope to the extent that lower charges will lead to increased demand for services.

1230. As noted above, not allowing separate disconnection charges will give Telstra incentives to invest in efficient churn and disconnection processes for the ULLS. Further, by promoting competition, there will be indirectly increased incentives to invest efficiently in the supply of ULLS and downstream services.

Paragraph 152CR(1)(b)

1231. The next matter concerns the legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service. (paragraph 152CR(1)(b)). The ACCC's views on the effect of this decision on these matters are discussed as part of the matter concerning the LTIE. The ACCC considers that allowing the disconnection charge sought by Telstra would allow Telstra to levy higher charges than are required to meet its legitimate interests. To the extent that not allowing a disconnection charge might cause inefficiency or confusion in MDF management, this will be minor and transitory only.

Paragraph 152CR(1)(c)

1232. The third matter is the interests of all persons who have the right to use the service. (paragraph 152CR(1)(c)). The ACCC considers that access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits, without being impeded in acquiring end-user customers or incurring unnecessary costs. These interests are promoted by arrangements that provide better access to effective churn and disconnection processes, and not incurring disconnection costs that could be avoided if an effective and efficient process and pricing were employed. As noted above, the ACCC considers that having separate disconnections and reconnections is an inefficient process that leads to higher costs of acquisition for access seekers, and makes access seekers face avoidable costs. Not allowing disconnection costs will be more likely to lead to efficient churn and disconnection processes.

Paragraph 152CR(1)(d)

1233. The fourth matter is the direct cost of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover these costs. As noted above, Telstra remains able to recover its efficient costs of disconnecting the ULLS, in charges for the subsequent connection, even if no disconnection charge is implemented.

Paragraphs 152CR(1)(e) & (f)

1234. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)).
1235. The ACCC considers that systems enhancements to give effect to a churn process should not be substantial, given that Telstra has successfully implemented churn processes elsewhere in its systems. However, to the extent that Telstra needs to recover the costs of such enhancements, these can be recovered through ULLS monthly charges, subject to Telstra demonstrating that the costs incurred were efficient.
1236. The ACCC has considered whether any particular approach would lead to circumstances that would impact on the operational and technical requirements necessary for the safe and reliable operation of the network. For reasons already outlined above, the ACCC considers that it will not compromise the safe and reliable operation of the network if it does not allow a disconnection charge.

Paragraph 152CR(1)(g)

1237. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has considered issues of economic efficiency above. In particular, the ACCC considers that the separate disconnection and reconnection process adopted by Telstra is not an efficient process for operating the network. Telstra's approach compromises competition and accordingly, the dynamic efficiencies caused by competition in downstream services would be lost if a separate disconnection charge is allowed. Productive efficiency is also better promoted by not allowing a separate disconnection charge, as this will encourage a lower cost method of making ULLS disconnections that does not involve an unnecessary visit to the exchange. In respect of allocative efficiency considerations, the ACCC notes that if money is not spent on inefficient processes then it can be redirected elsewhere.

ACCC's conclusion on disconnection costs

1238. The ACCC has considered the parties' submissions, its expert's advice and weighed up the matters listed under section 152CR(1) in considering the issue of disconnection costs. It has also had regard to the ULLS pricing principles.
1239. In its consideration above, the ACCC notes that in general most matters in section 152CR(1) are in favour of disallowing disconnection costs for the ULLS, as this would represent an efficient process that would promote competition, best reflect the interests of access seekers and allow for recovery of efficient costs of disconnections. The argument in favour of a disconnection charge is that Telstra may experience inefficiencies or confusion in its management of the MDF in exchanges. However the ACCC considers that any

such inefficiency or confusion would be minimal and transitory, and is outweighed by the matters in favour of disallowing disconnection costs.

1240. As noted by Telstra, the ULLS pricing principles do not explicitly deal with disconnection charges. However, the principles do specify that a TSLRIC+ pricing approach should be used to price the ULLS and hence support the inclusion of costs that are representative of efficient, forward-looking levels. The ACCC has reached a view that a separate disconnection activity does not represent an efficient process.
1241. The ACCC has considered whether it would be necessary to allow costs in certain circumstances – for example where the disconnection did not arise from churn but rather from an end-user cancelling a service and an access seeker handing back the line to Telstra. As discussed above, the ACCC considers that it would not be appropriate to allow such a charge, having regard to Telstra’s ability to defer jumper removal until a reconnection. The Layer 10 report considered that current ULLS numbers might be small and so a charge for manual data entry for disconnections would be appropriate. However, the ACCC considers that it is more relevant to consider the current and likely future demand for ULLS. The ACCC considers that, given that future demand for ULLS and the consequent number of ULLS disconnections will be higher than current levels, an efficient operator would not maintain an inefficient process requiring manual data entry for all disconnections. Accordingly the ACCC has not allowed a charge for manual data entry for ULLS disconnections stemming from an end-user cancellation and an access seeker handing back the line to Telstra.
1242. To sum up, the ACCC has maintained its position from the consultation paper that no cost allowance for disconnections should be allowed for the ULLS. Accordingly, the ACCC has neither specified a disconnection charge, nor a cost increment in ULLS connection charges to allow for disconnection costs in the final determinations for these access disputes.

4.2.9 Miscellaneous matters

1243. The ACCC raised with the parties in its consultation paper a number of further matters that have a bearing on ULLS ‘single’ connection terms. The ACCC’s views on these matters are discussed below:

Discounts for unmanaged bulk connections

1244. The ACCC proposed in a letter to the parties dated 5 April 2007, and in its consultation paper, that the charge for ULLS single connections should apply for bulk orders connected outside of a MNM.
1245. Telstra, Chime, PowerTel and Request submitted that the ACCC’s proposed position was appropriate.⁷³³ Primus submitted that the ACCC should take into

⁷³³ Telstra, above n 561, p. 15; Chime, above n 562, p. 5; PowerTel and Request, above n 562, p. 37.

account analysis regarding Telstra's opportunities to batch MDF connections in exchanges in each band, but did not seek separate prices for bulk orders.⁷³⁴

1246. The ACCC does not consider it appropriate to determine connection charges for unmanaged bulk connections, but rather considers that the charge for ULLS 'single' connections should apply in those circumstances. This is because it considers that the average contractor charges already reflect batching, and that there appears little potential for further cost efficiencies arising due to ULLS orders being submitted at the one time. The ACCC notes that its prices already take into account the prevalence of singular and multiple connections of the ULLS.

Costs for 2006-07 and 2007-08

1247. As noted above, for the prices in the ACCC's consultation paper and DFDs, the 3P preliminary quotes on which the ACCC estimated jumpering, travel, vehicle and tools costs for singular jumpering related to 2006-07 while the quotes used for multiple jumpering related to 2005-06.
1248. To obtain estimates of jumpering, travel, vehicle and tools costs for 2005-06, 2006-07 and 2007-08, the ACCC proposed in its consultation paper to deflate and inflate the quotes using *ABS 6345 Labour Price Index 'Ordinary time hourly rates of pay excluding bonuses; Australia; Communication services; Private; All occupations'*. This was because labour is considered the key component of these costs. The ACCC proposed in its consultation paper to use the annual percentage change as observed at 30 June 2006. The ACCC also inflated 2005-06 back-of-house costs using the same index.
1249. The ACCC's consultation paper sought views on the appropriateness of using Telstra's anticipated increase across all products in its install and maintenance contracts on 1 July 2007, being [c-i-c] per cent.
1250. As noted above, Telstra provided some additional quotes to those available at the time of the DFDs.
1251. Telstra submitted that there should be no backdating, or that any backdated period should reflect costs for Telstra's own staff. The ACCC has considered these issues earlier in these reasons at paragraph 1143 onwards. However Telstra submitted that, if its arguments were not accepted, it did not object to the ACCC's proposed backdating approach.⁷³⁵
1252. Optus submitted that any actual change should only be used to deflate costs, and that forecast changes should be used for inflating costs.⁷³⁶ Primus and

⁷³⁴ Primus, above n 562, p. 7.

⁷³⁵ Telstra, above n 562, p. 24, Telstra, above n 596, p. 7.

⁷³⁶ Optus, above n 562, [9.12].

Chime submitted that ABS rates should be preferred to Telstra's rate.⁷³⁷
PowerTel and Request agreed with the ACCC's proposed approach.⁷³⁸

1253. The ACCC has calculated costs for the three financial years priced in the final determinations by deflating and inflating cost components as follows:

- For ULLS singular jumpering quotes, the ACCC has taken the ULLS singular quotes provided by Telstra for 2007-08 and deflated those costs by [c-i-c] to obtain rates for 2006-07, and by the 3.29% ABS 6345 Labour Price Index rate to obtain rates for 2005-06.
- For ULLS multiple jumpering quotes, Telstra has provided the ACCC with quotes for 2005-06 and 2007-08. The ACCC has used these rates for those two financial years. For 2006-07, the ACCC has taken the mid-point between those rates.
- For back-of-house costs, the ACCC has indexed the 2005-06 costs for the 2006-07 and 2007-08 financial years by using the ABS 6345 Labour Price Index rate noted above.
- Following Telstra's advice that materials costs are reflected in contractor charges, it is unnecessary to derive discrete cost allowances for this cost category. Annual changes in these costs are reflected in the escalation of the contractor quotes.

Cost model

1254. A simple connections cost model that adopts the ACCC's views is attached to these reasons. It is based on the same structure as the previous model that was provided to the parties with the ACCC's discussion paper. The contents of this cost model are to be treated as commercial-in-confidence and subject to the confidentiality undertakings given and directions made, as it reproduces information that is confidential to the parties.

1255. A copy of the proposed cost model was provided to the parties for comment at the time the consultation paper was provided.

1256. Primus and Chime both submitted that there was no basis for the rounding up of charges adopted by the ACCC and that doing so was highly inappropriate.⁷³⁹

1257. Rounding of cost estimates is the usual approach in setting access charges, and recognises that there is a degree of imprecision and margin for error inherent in modelling of this nature. It represents a further conservative measure to ensure that charges are not set below efficient, forward-looking costs. The ACCC considers that rounding is an appropriate allowance in this regard.

⁷³⁷ ~~Primus, above n 562, p. 12; Chime, above n 562, p. 7.~~

⁷³⁸ PowerTel and Request, above n 562, p. 38.

⁷³⁹ Primus, above n 562, p. 12; Chime, above n 562, p. 7.

Averaged or de-averaged charges

1258. As noted previously, the ACCC proposed in its consultation paper to specify geographically de-averaged ULLS ‘single’ connection charges, in line with its ULLS pricing principles.
1259. Telstra submitted that averaged prices would be consistent with the ACCC’s obligations under the TPA, and referred the ACCC back to its submissions in relation to geographic averaging of ULLS monthly charges.⁷⁴⁰ Access seekers supported the ACCC’s proposed position of setting de-averaged charges.⁷⁴¹
1260. The ACCC has considered the averaging and de-averaging of ULLS charges in the context of its consideration of the appropriate ULLS monthly charges to apply to each access seeker. The ACCC considers that it is unnecessary to replicate that analysis here. Having had regard to the factors considered in that analysis, including the legislative matters in section 152CR(1) and the ULLS pricing principles, the ACCC has decided to specify geographically de-averaged ULLS single connection charges.

Bands 1, 2, 3

1261. The ACCC proposed in its consultation paper to not specify charges to apply to ULLS ‘single’ connections in Band 4, as there is little if any demand for the ULLS in this Band. Telstra, Primus, Chime, PowerTel and Request all agreed with the ACCC’s approach.⁷⁴² The ACCC has maintained its proposed position in this FD.

4.2.10 Commencement date, expiry date and interest

1262. The ACCC has backdated the ULLS single connection charges. The charges apply until 31 July 2008. Interest is payable on any over- or under-payment that has occurred. The term of backdating, and reasons for the approach have been discussed previously in section 3.6 of this statement of reasons.

4.2.11 Changes to the draft final determination

1263. The ACCC provided a DFD to the parties for comment. Some of the terms specified in the FD differ to some extent to those proposed at the DFD stage. These changes reflect revised cost data, backdating and the ACCC’s final approach to cutover testing. These changes have already been discussed in these reasons.
1264. Telstra has also suggested some amendments to the terms of the FD. Telstra submits that the terms of the FD should be further integrated into the existing

⁷⁴⁰ Telstra, above n 561, p. 24.

⁷⁴¹ Optus, above n 562, p. 23; Primus, above n 562, p. 12; Chime, above n 562, p. 8; PowerTel and Request, above n 562, p. 39.

⁷⁴² Telstra, above n 561, p. 25; Primus, above n 562, p. 12; Chime, above n 562, p. 8; PowerTel and Request, above n 562, p. 39.

commercial arrangements between the parties.⁷⁴³ In Telstra's view, this would better ensure that the parties are able to determine the arrangements to apply between them. Telstra did not suggest particular drafting changes but suggested that definitions from access agreements should be adopted. Telstra also raises concerns about the term "price calculation date" not being defined in the schedule but rather in the main body of the determination.⁷⁴⁴ Telstra also submitted that, as it had submitted in regards to monthly charges, it had concerns about the Band definitions. PowerTel and Request do not consider the terms of the determination to be uncertain.⁷⁴⁵

1265. The ACCC is willing to consider harmonising the terms of a determination with contractual arrangements that exist between the parties. However, in this instance, particular drafting has not been suggested. Further, the ACCC does not consider that there is any potential for confusion if its approach in the DFD is maintained. Accordingly the ACCC has not attempted to harmonise the determination with access agreements.
1266. The ACCC has defined "price calculation date" separately in the schedules to the final determination where necessary to reflect differing price calculation dates for different FD terms.
1267. The ACCC has considered Telstra's submissions about Bands in the context of its consideration of the appropriate ULLS monthly charges to apply to each access seeker. The ACCC considers that it is unnecessary to replicate that analysis here. The ACCC has amended its approach to Bands slightly in view of Telstra's submissions.

⁷⁴³ Telstra, above n 561, p. 6.

⁷⁴⁴ Telstra, *op cit*, p. 7.

⁷⁴⁵ PowerTel and Request, above n 573, p. 45.

4.3 ULLS Managed Network Migration Terms and Conditions

4.3.1 Background

1268. A Managed Network Migration (“MNM”) is a transfer or migration of services that is achieved by the project management by Telstra of a coordinated cancellation and connection of services.

1269. MNM terms and conditions include:

- connection charges;
- order cancellation charges;
- a specified minimum number of ULLS connections as a precondition for requesting a MNM and a minimum MNM charge per exchange;
- MNM plan terms such as forecasting timeframes and migration plan amendment terms.

4.3.2 Participants

1270. Telstra, Chime, Optus, Primus, PowerTel and Request are participating in the joint arbitration hearing on the MNM issues (although, in the fourth dot point above, the participation of PowerTel and Request is limited to cancellation charges only).

4.3.3 Current terms and conditions

1271. Chime, Optus, Primus, PowerTel and Request are each in dispute with Telstra over ULLS MNM terms and conditions addressed in agreements between Telstra and each of the parties.

1272. Subject to paragraph 1273, the current terms and conditions between Telstra and PowerTel/Request are variously addressed in, among other clauses, the access agreements between PowerTel and Telstra and between Request and Telstra.

1273. The terms and conditions in respect of ULLS MNM connection charges were specified in interim determinations made in these disputes during part of the arbitrations.

4.3.4 Prior consideration

1274. The ACCC considered ULLS terms and conditions in setting interim determinations in each of the access disputes involved in this joint arbitration hearing.

4.3.5 Principles to apply

1275. The ACCC initially proposed to the parties as part of its consultation paper that accompanied its draft final determination (DFD) that ULLS MNM charges

should be determined by reference to the draft ULLS pricing principles, as set out in:

- ACCC, *Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination*, July 2006, Chapter 7

and the previous ULLS pricing principles, as set out in:

- ACCC, *Pricing of unconditioned local loop services (ULLS)—final report* March 2002.

1276. Both these documents state that the ACCC will apply a TSLRIC pricing principle to the pricing of the ULLS. In practice, the ACCC typically includes a contribution to indirect or organisational costs (TSLRIC+).

1277. The ACCC's view in its consultation paper was that, under those principles, ULLS MNM charges should comprise the forward-looking efficient costs of ULLS managed network migrations and be de-averaged. However, it noted that averaged charges may be justified where the distortionary effect of an average charge is not significant.

1278. Following the issuing of final ULLS pricing principles in November 2007, the ACCC consulted with the parties again on the applicability of those new pricing principles, as set out in:

- ACCC, *Unconditioned Local Loop Service—final pricing principles*, November 2007.

1279. The final pricing principles contained the following conclusions relevant to ULLS MNM charges:

- a TSLRIC+ pricing principle should be applied to the ULLS;
- the ULLS charges should be geographically de-averaged;
- connection charges should be set with reference to the amounts charged by 3P contractors to Telstra for jumpering work in exchanges, indirect costs and back-of-house costs.

1280. The parties' submissions regarding the use of these principles have been discussed earlier in section 3.1 of these reasons. The parties are generally supportive of the use of the ULLS pricing principles to apply to ULLS MNM charges, although Telstra makes submissions against applying certain aspects of the ULLS pricing principles.

1281. The ACCC has had regard to the 2007 final ULLS pricing principles as required by sub-section 152AQA(6) of the TPA in determining the price-related terms for ULLS MNMs. Under those principles, a TSLRIC+ pricing approach should be applied to the charges, which comprise the forward-looking efficient costs of connecting the ULLS as part of a MNM. Further, in principle, these charges should be geographically de-averaged. However, averaged prices can be justified where the distortionary effect of an averaged charge is not significant.

Here, the same costs (categories and level) apply to ULLS MNMs across the different geographic bands. Hence, averaging across the geographic bands does not lead to a different charge.

4.3.6 Technical advice

Introduction

1282. Dr Paul Brooks of Layer 10 Pty Ltd (formerly of Consultel) was appointed by the ACCC under section 152DC(1)(e) of the TPA to provide expert technical advice to the ACCC about ULLS connection and disconnection costs. The ACCC informed the parties of this appointment in May 2007.
1283. The ACCC has received a number of reports (some of a draft or interim nature) concerning the connection and disconnection of the ULLS. The reports that are relevant to an updated assessment of the efficient costs of ULLS MNM costs were prepared by Dr Paul Brooks (now of Layer 10 Pty Ltd) and include:
- Consultel, *Small scale MNMs between Wholesale ADSL, ULLS and LSS – Interim Report*, 13 March 2007.
 - Consultel, *Transferring Services between ULLS and LSS – Draft report*, 17 August 2006.
 - Consultel, *Analysis relating to Primus-Telstra ULLS Dispute – Interim report*, 13 March 2006.
 - Consultel, *Analysis of ULLS and LSS Undertakings and Subsequent Submissions – Final Report*, February 2006.
1284. In its June 2007 consultation paper, the ACCC proposed to the parties that these reports should be considered and, further, that Dr Brooks' views should be sought on relevant points raised in the parties' submissions. The ACCC sought the parties' views on this approach.
1285. Following the parties' submissions and Dr Brooks' provision of his finalised Layer 10 report to the ACCC on 23 January 2008, the ACCC provided the report to the parties for any further comments. This was because Dr Brooks reached certain limited conclusions in his finalised report that parties had not had the opportunity to comment on previously.

Submissions from parties

1286. Telstra reiterates its objections to the ACCC's reliance on material prepared by Dr Brooks in determining charges associated with ULLS MNMs.⁷⁴⁶ Telstra's criticisms regarding reliance on Consultel's reports have already been discussed previously in section 4.2.5 of these reasons dealing with single connections.

⁷⁴⁶ Telstra, *Unconditioned Local Loop Service ("ULLS") – Submissions of Telstra – Part 5 – ULLS Managed Network Migrations ("MNMs") General issues*, 16 August 2007, p. 3.

1287. The access seeker parties do not object to the ACCC having regard to the Consultel reports. These access seeker submissions have already been discussed in detail previously in the section of these reasons dealing with single connections and are largely repeated in relation to ULLS MNMs. In summary, Chime submits that the Consultel reports provide useful advice in relation to the disputed charges.⁷⁴⁷ PowerTel and Request consider Dr Brooks' advice to be fair, reasonable and consistent with their experience.⁷⁴⁸ Optus submits that the ACCC should rely on the Consultel reports as they constitute objective advice.⁷⁴⁹ Primus submits that any Telstra concerns about outdated reports should increase the regard that should be had to its own reports.⁷⁵⁰ Chime makes a similar submission.⁷⁵¹

ACCC's views

1288. The ACCC has provided its views on the role of Dr Brooks in section 4.2.5 of this statement of reasons dealing with ULLS single connections. The ACCC considers that the same conclusions apply in relation to ULLS MNM connections. Accordingly, the ACCC considers that Dr Brooks is an appropriate expert to appoint under section 152DC(1)(e) to provide advice to the ACCC.

4.3.7 Types of ULLS MNM connections

1289. As with single connections, there are potentially a number of different types of network migrations that could be requested. In these proceedings, consideration was given to connections of ULLS where the MNM connections are transfers of end user data services from a Telstra wholesale PSTN service, connections of ULLS on lines previously being supplied with a ULLS to another access seeker and connections of ULLS on lines previously being supplied with a LSS.

A. Connections of ULLS where the MNM connections are transfers of end user data services from a Telstra wholesale PSTN service

1290. This type of ULLS MNM connections is a MNM of connections where the ULLS is to be provided on a copper pair that was being used by Telstra to provide PSTN services (and may also have provided xDSL services) on a wholesale or retail basis. This type of connections could be considered as the MNM equivalent to the single ULLS connection type.

⁷⁴⁷ Chime, *Unconditioned Local Loop Service (ULLS) Submission of Chime Communications Pty Ltd (Chime), Part 4 – Mass Network Migration Terms and Conditions*, 16 August 2007, p. 1.

⁷⁴⁸ PowerTel and Request, *Unconditioned local loop service, submissions of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 16 August 2007, pp. 40-41.

⁷⁴⁹ Optus, *Unconditioned local loop service (ULLS), Submission of Optus*, 16 August 2007, [5.6]

⁷⁵⁰ Primus, *Unconditioned Local Loop Service (ULLS), Submission of Primus Telecommunications Pty Ltd (Primus), Response to Part 5 of Telstra's submission – ULLS managed network migrations (MNM) general issues*, 13 September 2007, p. 1.

⁷⁵¹ Chime, *Unconditioned Local Loop Service (ULLS), Reply Submission of Chime Communications Pty Ltd (Chime), Part 4 – ULLS Managed Network Migrations (MNM)*, 13 September 2007, p. 1.

1291. This type of MNM is used by access seekers to move customers to the access seekers' own exchange-based equipment from resold Telstra services. The ACCC considers it appropriate to set MNM connection terms for this category of MNMs, given the importance of the process to access seekers switching end users to the access seekers' own exchange-based equipment.

B. MNM connections of ULLS on lines previously being supplied with a ULLS to another access seeker

1292. The ACCC proposed in its consultation paper to also set a MNM connection price for ULLS MNM connections on lines that were previously used by Telstra to supply ULLS to another access seeker. This type of connection could be considered as the MNM equivalent to the single TULLS connection type.

1293. The ACCC considers that it is appropriate to set MNM connection terms for this category of MNMs, which may be used by access seekers to switch customers from another access seekers' services. The ACCC's view is that it is appropriate to align MNM charges where the connections are being done as part of a transfer from an existing ULLS or wholesale PSTN/ADSL service on the basis that each type of connection requires similar jumpering work.

C. MNM connections of ULLS on lines previously being supplied with a LSS

1294. As with single connections, an access seeker may request that a ULLS be connected on lines on which it, or a related entity, was previously acquiring a LSS. As noted in the section of these reasons dealing with single ULLS connections, Telstra, Primus and Chime have participated in the part of the joint arbitration hearing on the issue of transfers from LSS to ULLS. The ACCC's consultation paper did not propose to determine prices for LSS-ULLS transfers in final determinations for those access seekers that were not participating in that part of the joint arbitration hearing concerning those transfers.

1295. For those parties participating in the joint arbitration hearing in relation to LSS to ULLS transfers, the ACCC considers such connections separately in the section of these reasons dealing with LSS-ULLS transfers.

4.3.8 Assessment of efficient costs

1296. There are a number of distinct cost categories that are relevant to ULLS connections:

- 'Back-of-house' costs;
- Jumpering, travel, vehicle, tool and materials (copper pairs) costs; and
- Indirect costs.

1297. Telstra uses third party contractors to perform the exchange-based work necessary to connect and disconnect the ULLS as part of a MNM. Telstra staff and systems perform back-of-house tasks.

1298. The ACCC's ULLS pricing principles state that connection charges should be set by reference to the amounts charged by third party (3P) contractors to Telstra for jumpering work in exchanges, and to indirect costs and back-of-house costs.⁷⁵²
1299. The ACCC proposed in its consultation paper that prices be set for ULLS connections where the ULLS is being connected as part of an MNM involving the transfer of end user data services from a Telstra wholesale PSTN service, or from a line that Telstra is using to supply a ULLS to another access seeker as follows for 2005-06 (and indexed for subsequent years):

Draft final determination ULLS MNM charges, based upon efficient costs for MNMs involving 20 and 50 connections

No of services in MNM	Based
up to 20 services	Cost for 20 service MNM (\$660)
21 to 45 services	Cost for 20 service MNM (\$660) + incremental cost per connection for 21 to 45 service MNM (\$27)
46 to 50 services	Cost for 50 service MNM (\$1,363)
more than 50 services	Cost for 50 service MNM (\$1,363) + incremental cost per connection for 50 service MNM (\$25)

1300. The components of the efficient cost of ULLS MNM connections are discussed below.

'Back of house' costs

Introduction

1301. Costs associated with the following Telstra workgroups and processes are considered within this category:
- Wholesale customer transfer centre (WCTC);
 - Data Activation Centre (DAC); and
 - Integrated deployment solution (IDS).
1302. These work groups have periodically been reorganised. Now, the activities associated with these roles are undertaken by the Wholesale Customer Transfer (WCT, which has taken over from WCTC), Wholesale Customer Service (WCS), IDS and DAC groups.
1303. The ACCC proposed in its consultation paper to include an allowance for DAC and IDS group costs within ULLS MNM connection charges. It proposed to base these allowances on advice previously provided by Consutel concerning

⁷⁵² ACCC, *Unconditioned local loop service (ULLS)—final pricing principles*, November 2007.

the efficient costs associated with DAC and IDS group tasks. The relevant costs are those incurred by Telstra in coordinating ULLS MNMs and scheduling contractors to perform them. The ACCC proposed that the costs associated with Telstra's wholesale customer front of house activities (WCTC) be recovered through ULLS annual charges.

Submissions from the parties

Wholesale customer transfer centre (WCTC)

1304. Telstra advises that the WCT group has taken over from the WCTC and manages the provisioning of ULLS MNMs. It also advises that the function of WCS is to manage the billing of ULLS MNMs.⁷⁵³
1305. Telstra submits that the costs of the WCT are not recovered through ULLS annual charges. Telstra submits that no element of ULLS connection, disconnection or MNM costs are counted in Telstra's calculation of ULLS monthly charges in its "Telstra model" that is based on current cost accounting data. Therefore, Telstra submits that the ACCC should allow an amount for WCT costs in the ULLS MNM connection charges.⁷⁵⁴ If WCT costs are not included in the connection charges, Telstra calculates an additional monthly charge of \$[c-i-c] per month to cover WCT costs.⁷⁵⁵ Telstra reiterated this position in its submission on the finalised Layer 10 report.⁷⁵⁶
1306. Telstra submits that the efficient labour rate and time per connection for WCT costs are higher than the ACCC's estimates. However Telstra does not object to the ACCC's calculations of the amounts for WCT costs.⁷⁵⁷
1307. Access seekers agree with the ACCC's view in its consultation paper not to include an allowance for WCTC costs in the ULLS MNM connection charges.⁷⁵⁸ Optus proposes that if the ACCC determines that WCTC costs should be recovered in connection charges, then it would be appropriate to reduce annual charges by a corresponding amount.⁷⁵⁹ Further, Optus considers that Telstra has forwarded no evidence to support the inclusion of WCTC costs in connection charges.⁷⁶⁰ Primus submits that WCTC costs should be covered in annual charges, but disputes that an additional \$[c-i-c] per month charge should

⁷⁵³ Telstra, above n 746, p. 6.

⁷⁵⁴ Telstra, *op cit*, pp. 6-7.

⁷⁵⁵ Ibid; Telstra, *Unconditioned Local Loop Service (ULLS), Reply Submissions of Telstra, Part 4 – ULLS Managed Network Migrations ("MNMs") General Issues*, p. 1.

⁷⁵⁶ Telstra, *Unconditioned Local Loop Service ("ULLS"), Supplementary Submissions of Telstra: Layer 10 report—Connections, Disconnections and MNMs*, 12 February 2008, p. 7.

⁷⁵⁷ Telstra, above n 746, p. 7.

⁷⁵⁸ Chime, above n 747, p. 3; Primus, *Unconditioned Local Loop Service (ULLS) Submission of Primus Telecommunications Pty Ltd (Primus), Part 4 – Mass Network Migration Terms and Conditions*, 16 August 2007, p. 5; PowerTel and Request, above n 748, p. 42; Optus, above n 749, [10.4].

⁷⁵⁹ Optus, above n 749, [10.4].

⁷⁶⁰ Optus, *Unconditioned Local Loop Service (ULLS), Reply submission of Optus*, 13 September 2007, [6.2].

be included in annual charges.⁷⁶¹ Primus and Chime make equivalent submissions in their submissions on the finalised Brooks report.⁷⁶² PowerTel and Request agree with the ACCC's proposed approach to back-of-house costs.⁷⁶³

Data Activation Centre (DAC)

1308. Telstra submits that the efficient labour rates and times per connection for DAC costs are higher than the ACCC's calculations. Telstra submits that it is unreasonable for the ACCC to adopt the conclusions reached by Dr Brooks with respect to DAC costs. Telstra advises that efficient labour rates vary from team to team. However, it submits that the appropriate hourly rate is \$[c-i-c], based on the hourly rate of a particular class of Telstra employee plus overheads.⁷⁶⁴ Telstra submits that the time taken by DAC to perform a MNM is [c-i-c] minutes per service, leading to a DAC cost of \$[c-i-c] per connection.⁷⁶⁵
1309. PowerTel and Request agree with the ACCC's proposed DAC costs.⁷⁶⁶
1310. In relation to both DAC and IDS labour rates, Chime submits that Telstra's claimed back-of-house costs are inflated and the labour rate proposed by the ACCC in its consultation paper is too high. Chime submits that its Customer Service Representative role is directly comparable to the role of Telstra's DAC staff. The total annual labour cost of these staff range from \$43,560 to \$50,820. Chime submits that the ACCC should have regard to Chime's own staff costs or alternatively to the industry salary survey, which Chime considers sets a suitable benchmark for efficient forward-looking labour costs of the IDS group. This survey indicates that the average uplifted total remuneration cost for the Australian telecommunications industry ranges from \$[c-i-c] to \$[c-i-c].⁷⁶⁷
1311. Primus submits that the appropriate labour rate for DAC staff is \$28.28 per hour for 2006/07, based on the fully uplifted labour costs of Primus staff working in complex provisioning roles.⁷⁶⁸
1312. Chime and Primus submit that Telstra's estimate of the time required to perform DAC activities for ULLS connections is not that of an efficient operator.⁷⁶⁹ They submit that the time allocated to the DAC to perform a MNM should be 3

⁷⁶¹ Primus, above n 750, pp. 3-4.

⁷⁶² Chime, *Unconditioned Local Loop Service (ULLS)—Submission of Chime Communications Pty Ltd (Chime) regarding supplementary consultation paper on draft final determination*, 12 February 2008, p. 7; Primus, *Unconditioned Local Loop Service (ULLS)—Submission of Primus Telecommunications Pty Ltd (Primus) regarding supplementary consultation paper on draft final determination*, 12 February 2008, p. 7.

⁷⁶³ PowerTel and Request, above n 748, p. 42.

⁷⁶⁴ Telstra, above n 746, p. 8.

⁷⁶⁵ Telstra, above n 746, pp. 7-8.

⁷⁶⁶ PowerTel and Request, above n 748, p. 42.

⁷⁶⁷ Chime, above n 747, p. 3-4; [c-i-c]

⁷⁶⁸ Primus, above n 758, p. 5.

⁷⁶⁹ Chime, above n 751, p. 4; Primus, above n 750, p. 4.

minutes per service, reflecting the centre point of Consultel's estimate of 2 – 4 minutes per service on average.⁷⁷⁰

1313. Optus considers that the ACCC has overstated DAC costs. It considers that the 'manual assignment of cable pairs' task claimed by Telstra is not required for the migration of IULLS. Optus submits that an allocation of 1 – 2 minutes per service is a generous estimate of the time it takes the DAC to perform a MNM and thus DAC costs should be reduced to \$2 per connection.⁷⁷¹
1314. In its reply to Primus' initial submission, Telstra contends that the activities undertaken by a CFW5 employee are different and more complex than those undertaken by Primus grade 4 provisioning staff. Further, Telstra disputes that Primus' rate is fully uplifted.⁷⁷²

Integrated deployment solution (IDS)

1315. PowerTel and Request agree with the ACCC's proposed IDS costs.⁷⁷³
1316. Chime and Primus consider that they have insufficient data to assess the accuracy of Telstra's claim that it would take an efficient operator 126 minutes to perform IDS functions in relation to an ULLS MNM. However, they submit that the ACCC's proposed labour rate is too high.⁷⁷⁴ Primus considers that the appropriate labour rate is \$28.28 per hour.⁷⁷⁵
1317. Optus opposes the ACCC's inclusion of IDS costs in the ULLS MNM connection costs. It considers that Telstra has not adequately explained the role of IDS in relation to MNM connections. Optus submits that these costs are likely to be recovered through the ULLS specific cost pool or through the mark-ups of annual or connection charges.⁷⁷⁶
1318. In reply to Chime's initial submission, Telstra contends that it is unlikely that Chime staff are undertaking work equivalent to Telstra's IDS staff and therefore no weight should be given to Chime's submission. Further, Telstra considers that Chime's uplift is unusually low and does not reflect efficient costs. Telstra argues that there is no basis for asserting that the average nominal base salary for staff in an intermediate customer service role across the industry is a reasonable proxy for Telstra's efficient IDS labour costs.⁷⁷⁷

ACCC's views

⁷⁷⁰ Chime, above n 751, p. 3-4; Primus, above n 758, p. 5.

⁷⁷¹ Optus, above n 749, [10.5].

⁷⁷² Telstra, above n 755, p. 2.

⁷⁷³ PowerTel and Request, above n 748, p. 42.

⁷⁷⁴ Chime, above n 747, p. 4; Primus, above n 758, p. 5.

⁷⁷⁵ Primus, above n 758, p. 5.

⁷⁷⁶ Optus, above n 749, [10.6].

⁷⁷⁷ Telstra, above n 755, p. 2.

1319. The ACCC has considered the parties' submissions, and has determined to maintain its estimates of efficient back-of-house costs that were proposed to the parties.

Wholesale customer transfer centre (WCTC)

1320. The ACCC has not included an allowance for WCT and WCS costs in the ULLS MNM connection charges. The ACCC notes Telstra's submission that the activities undertaken by these groups are not counted in Telstra's calculation of ULLS monthly charges in its "Telstra model" that is based on current cost accounting data. The ACCC has not used Telstra's model for setting monthly charges. Instead it has based its calculation of ULLS monthly charges on a separate specific cost model and Telstra's separate PIE II model. The ACCC considers that Telstra's description of the activities undertaken by the WCT and WCS groups indicates that they are front of house costs. These costs are reflected in the specific cost pool that the ACCC has recognised for the purposes of setting ULLS monthly charges for the access seekers participating in the joint arbitration hearings.

Salary costs

1321. The efficient hourly labour cost that the ACCC considers appropriate for IDS and DAC staff for the period up to 30 June 2006 is \$60, with annual indexing used for later years. This is considered to result in a reasonable measure of the respective costs that Telstra incurs for each period on an efficient and forward-looking basis and falls between the rates advocated by the parties in these proceedings. The ACCC's consideration of salary costs in relation to single connection charges is contained in section 4.2.7 of these reasons relating to the assessment of efficient costs for single connections. The ACCC is of the view that the same considerations and conclusions apply in relation to salary costs for ULLS MNMs as for ULLS single connections.

Integrated deployment solution (IDS)

1322. The ACCC does not consider that the costs associated with the tasks performed by the IDS group would already be recovered within the indirect cost mark-up, as suggested by Optus. The mark-up for indirect costs is to cover front-of-house costs such as managing contracts and billing, and not for the day-to-day activities of the IDS group in scheduling work.
1323. Adopting the position advocated by Optus would have reduced the allowance for back-of-house costs below the levels proposed in the ACCC's consultation paper. The ACCC has assessed its proposed approach and that advocated by Optus against the subsection 152CR(1) matters.
1324. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users. This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section

152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).

1325. The ACCC considers generally that efficient, forward-looking costs of ULLS connections best promote competition. The ACCC's ULLS pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which of the possible approaches best estimates efficient forward-looking costs and would better encourage efficient entry into downstream markets using own infrastructure. Optus' position would be preferable if this better reflected the forward-looking, efficient cost of performing IDS group tasks. However, the ACCC is not satisfied that disallowing the IDS group costs would lead to a suitable benchmark for efficient, forward-looking costs of ULLS MNM connections. This is because it appears that these costs are not of the category recovered in specific costs. Disallowing IDS group costs would therefore tend to lead to ULLS MNM costs being below efficient, forward-looking levels.
1326. The ACCC does not consider that the approach taken to this issue will affect the objective of achieving any-to-any connectivity.
1327. In relation to the efficient use of and investment in infrastructure, the ACCC considers the efficient use of and investment in both the infrastructure used to supply the ULLS and the infrastructure used to supply downstream services such as voice and DSL.
1328. The ACCC considers that the efficient use of and investment in infrastructure will be encouraged where Telstra is able to recover the efficient forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. For similar reasons to those discussed with reference to the promotion of competition, the ACCC considers that adopting Optus' position would not better encourage more efficient use of and investment in infrastructure, or the efficient supply of the ULLS and downstream services. This is because the IDS group costs do not appear to be recovered elsewhere, and Telstra would therefore not be able to recover its efficient IDS group costs. Similarly, a ULLS MNM charge without an IDS cost allowance would be unlikely to lead to efficient investment by ULLS access seekers in the infrastructure used to supply downstream services to end-users.
1329. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. The ACCC considers that Optus' proposed approach would tend to compromise Telstra's legitimate interests, including its ability to recover direct costs, to the extent that Telstra incurred IDS group costs that were not recovered in ULLS MNM charges. The ACCC does not consider that the position would have a significant effect on Telstra's ability to exploit economies of scale and scope. In relation to Telstra's incentives to invest, the ACCC considers that, were Telstra unable to recover costs, Telstra may have less incentive to invest in its back-of-house activities.
1330. The next matter is the legitimate business interests of the provider and its investment in the facilities used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b) and the ACCC's

views were discussed above. The ACCC considers that Optus' proposed approach may compromise Telstra's legitimate interests.

1331. The next matter is the interests of all persons who have the right to use the ULLS (paragraph 152CR(1)(c)). The ACCC considers that ULLS access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits. However the ACCC does not consider that those interests extend to not paying for costs which are appropriately incurred by Telstra and not recovered elsewhere. Accordingly the ACCC does not consider that adopting Optus' approach would be necessary to satisfy access seekers' interests.
1332. The fourth matter is the direct costs of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover those costs. As discussed in the ACCC's consideration of the LTIE, the ACCC considers that Optus' approach may not allow Telstra to recover its direct costs of ULLS MNMs.
1333. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The costs of extensions to Telstra's systems necessary to allow IDS involvement in ULLS MNMs are taken into account in other charges, but not the time taken for the IDS activities to take place. The ACCC considers that the safe and reliable operation matter does not materially contribute to this decision.
1334. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has considered efficiency issues above in its consideration of the LTIE. The ACCC considers that disallowing the IDS costs would not promote the economically efficient operation of the network.
1335. The ACCC's ULLS pricing principles state that connection charges should be determined by reference to back-of-house costs. Having considered the relevant matters, the ACCC considers that it is appropriate to allow recovery of IDS group costs in the ULLS MNM charges, given that these do not appear to have been accounted for elsewhere. The ACCC will allow the [c-i-c] hour per MNM fixed cost originally proposed by Telstra and supported by the finalised Layer 10 report.⁷⁷⁸

Data Activation Centre (DAC)

1336. The parties have submitted differing estimates of the amount of DAC time that is incurred in making ULLS MNMs. The ACCC proposed in its consultation paper an amount to recover 4 minutes of activity per line. Telstra advocates an amount to recover [c-i-c] minutes of activity per line. Telstra supports its submission

⁷⁷⁸ Layer 10, *Analysis relating to ULLS access disputes—Primus, Chime, Optus, XYZed, Request, PowerTel and Telstra*, January 2008, p. 80.

- that [c-i-c] minutes is required with reference to its submission that manual intervention for service qualifications, POI validation and cable assignment by DAC operatives is required in a greater number of cases than assumed by the ACCC in its consultation paper.⁷⁷⁹
1337. Optus submits that 2 minutes per line should be allowed.⁷⁸⁰ Primus and Chime submit that 3 minutes per line would be a more appropriate allowance.⁷⁸¹ The finalised Layer 10 report, which reviewed the submissions of all the parties, recommends the use of 4 minutes per line.⁷⁸²
1338. The ACCC accepts Layer 10's analysis, and considers that this supports a finding of DAC involvement requiring around 4 minutes per line to perform DAC functions in relation to a ULLS MNM. In particular, the ACCC notes its analysis above in relation to the amount of time needed for manual service qualification in section 4.2.7 of these reasons in relation to the appropriate DAC time for single ULLS connections. The ACCC considers in that analysis that it is appropriate to allow a lower time for manual service qualification than sought by Telstra, given the likely efficient amount of manual intervention involved. The ACCC considers that those conclusions are also valid here in light of Telstra's submission that the allowance for DAC involvement in ULLS MNM connections is insufficient with reference to the need for manual intervention. Accordingly the ACCC considers that Telstra's cost claims for DAC time includes an allowance for an inefficient amount of manual intervention in connection processes, and that Telstra would be able to achieve a lower level of manual interventions.
1339. The ACCC considers the possible approaches to DAC costs, which include Telstra's [c-i-c] minute estimate, the ACCC's proposed 4 minutes based on the Layer 10 report and the lower estimates of access seekers, against the legislative matters below.
1340. Having regard to the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users (paragraph 152CR(1)(a)). This calls for consideration of a number of factors identified in section 152AB, being the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure, and subsidiary matters (paragraphs 152AB(2)(c)-(e), subsection 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A) and subsection 152AB(8)).
1341. The ACCC considers generally that efficient, forward-looking costs of ULLS connections best promote competition. The ACCC's ULLS pricing principles make this clear in the adoption of a TSLRIC+ methodology. Accordingly, it is relevant to consider which of the possible approaches best estimates efficient forward-looking costs. If charges faced by access seekers exceed the efficient forward-looking costs of connecting the ULLS, access seekers would face

⁷⁷⁹ Telstra above n 746, p. 7.

⁷⁸⁰ Optus, above n 749, [10.5].

⁷⁸¹ Chime, above n 751, p. 3-4; Primus, above n 758, p. 5.

⁷⁸² Layer 10, above n 778, p. 40, 42.

- higher charges based on costs that Telstra could avoid in the long run and that Telstra would not itself face in making connections for its services. This would discourage efficient entry in downstream markets for voice and DSL services.
1342. Telstra's claims around the average times it spends performing ULLS MNM connections refer to the actual, current times and manual intervention rates for all ULLS connections, not the forward-looking efficient average times it spends for ULLS MNM connections of the type being priced by the ACCC. The ACCC considers that Telstra's claim is not the best available measure of Telstra's forward-looking efficient DAC costs for connections. Given its conclusions in relation to DAC times in ULLS single connections, the ACCC considers that it is realistic to expect that Telstra would already incur, or over time be able to reduce its ULLS MNM DAC time to, a lower level for ULLS MNMs.
1343. Accordingly the ACCC considers that Telstra's estimates of the efficient time for DAC activity in ULLS MNM connections overstate the efficient level. The ACCC considers that, in relation to the lower estimates put forward by access seekers, these measures may run the risk of understating forward-looking efficient costs, which would also have detrimental effects on competition.
1344. The ACCC does not consider that the approach taken to this issue will affect the objective of achieving any-to-any connectivity.
1345. In relation to the efficient use of and investment in infrastructure, the ACCC considers the efficient use of and investment in both the infrastructure used to supply the ULLS and the infrastructure used to supply downstream services such as voice and DSL.
1346. The ACCC considers that the efficient use of and investment in infrastructure will be encouraged where Telstra is able to recover the efficient forward-looking cost of making ULLS connections, including a normal risk-adjusted return on capital employed. Connection charges including costs based on Telstra's current or past average times for ULLS MNM connections would lead to costs in excess of the efficient forward-looking cost, and would not represent efficient use of the infrastructure and records used for ULLS MNM connections, or the efficient incidence of manual intervention. Charges based on Telstra's actual cost base would also be less likely to encourage Telstra to seek out cost reductions that are open to it. Connection charges above efficient levels would discourage efficient investment by ULLS access seekers in the infrastructure used to supply downstream services to end-users.
1347. The ACCC considers that, in the long run, there should be no impediments to Telstra meeting the efficiency benchmark of 4 minutes for ULLS MNM connections. In relation to the matters identified in paragraph 152AB(6)(a), the ACCC considers that it is technically feasible for Telstra to achieve that connection time.
1348. Telstra's legitimate commercial interests include its ability to recover its costs and make a normal commercial return on capital employed. Setting the DAC component in ULLS connection charges at 4 minutes could be contrary to Telstra's legitimate commercial interests should it prevent Telstra from recovering its costs. This would be the case if Telstra could not, in making

- ULLS MNM connections, achieve that average allowance. However, as discussed above, the ACCC does not consider that there are valid reasons why Telstra could not achieve such a level of DAC involvement for ULLS MNM connections of the type being priced by the ACCC.
1349. The ACCC does not consider that this issue will have a significant effect on Telstra's ability to exploit economies of scale and scope. The ACCC considers that using the 4 minute level may give Telstra incentives to invest in more efficient back-of-house processes for ULLS MNM connections.
 1350. The next matter is the legitimate business interests of the provider and its investment in the facilities used to provide the ULLS (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b) and the ACCC's views were discussed above. The ACCC considers that, in the short run, Telstra's legitimate business interests may not be met to the extent that Telstra could not achieve the 4 minute benchmark for each ULLS MNM line connected. However, in the long run the ACCC considers that Telstra should be able to achieve at least that level. However setting the cost component lower than 4 minutes, as suggested by access seekers, may lead to a level of costs being allowed that Telstra could not achieve. If this was the case, this may be against Telstra's legitimate interests.
 1351. The next matter is the interests of all persons who have the right to use the ULLS (paragraph 152CR(1)(c)). The ACCC considers that ULLS access seekers' interests lie in being able to compete for the custom of end-users on the basis of their relative merits. It is in the interests of those access seekers to pay charges that reflect the efficient, forward-looking cost of connecting services. Paying ULLS MNM charges that reflect Telstra's actual cost base and current level of DAC manual intervention for all ULLS connections is contrary to those interests, as it would mean access seekers having to pay higher charges in excess of forward-looking efficient cost. However, access seekers' interests do not extend to paying charges based on timings that Telstra could not achieve. The estimates put forward by access seekers run the risk of being unnecessary to meet access seekers' interests.
 1352. The fourth matter is the direct cost of providing access to the declared service (paragraph 152CR(1)(d)). It calls for consideration to be given to Telstra's ability to recover those costs. The ACCC considers that Telstra will recover the direct cost of providing ULLS MNM connections in the long run because Telstra should be able to meet the efficiency benchmark of 4 minutes per ULLS MNM connection, having regard to Telstra's ability to achieve efficiencies in its manual intervention for ULLS MNM connections. However, using a lower benchmark as proposed by access seekers may lead to Telstra not being able to recover its direct costs.
 1353. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility (paragraphs 152CR(1)(e)-(f)). The cost of extensions to Telstra's ordering systems necessary to allow DAC involvement in ULLS MNMs have been taken into

account in other charges. The ACCC considers that the matter relating to safe and reliable operation does not materially contribute to this decision.

1354. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has considered efficiency issues above in its consideration of the LTIE. The ACCC considers that allowing costs based on Telstra's claim of [c-i-c] minutes would not promote the economically efficient operation of the customer access network (CAN).
1355. The ACCC's ULLS pricing principles state that connection charges should be determined by reference to back-of-house costs. Having considered the relevant matters, the ACCC considers that it is appropriate to allow 4 minutes per line for DAC group costs in the ULLS MNM charges. The ACCC considers that this is a conservative estimate which falls between the rates advocated by Telstra and the access seekers in these proceedings, and will best reflect the efficient forward looking costs of the DAC group in performing ULLS MNMs.

ACCC's overall conclusion on back-of-house costs

1356. The ACCC's ULLS pricing principles state that ULLS connection charges should be determined by reference to back-of-house costs. It is not necessary to allow for recovery of WCT/WCS costs in the ULLS MNM charges, given that these front-of-house costs are recovered already in the specific cost component of ULLS monthly charges. However, IDS group costs and DAC group costs are back-of-house costs that are appropriately recovered in the ULLS MNM costs.
1357. The ACCC will allow a recovery of costs for [c-i-c] hours of IDS group involvement per MNM, and 4 minutes per line connected for DAC costs.
1358. This approach results in an allowance for back-of-house costs of \$126 per MNM for the period ending 30 June 2006, indexed for later years, and a further allowance of \$4 per line connected as part of the MNM, indexed for later years.

Jumpering, travel, vehicle and tool costs; materials costs; indirect costs

1359. The ACCC proposed to base the efficient costs for jumpering, travel, vehicle and tool cost categories for ULLS MNMs on 3P contractor rates that Telstra obtained in relation to ULLS connections.
1360. The prices were calculated differently for ULLS MNMs involving 20 or 50 connections. The ACCC proposed to base the efficient costs for jumpering, travel, vehicle and tool cost categories for MNMs involving 50 or more services on 3P contractor rates provided by Telstra for substantial network migrations. For smaller scale MNMs ranging from 20 to 49 services, the ACCC proposed to base the efficient costs for these categories on 3P contractor rates that Telstra obtained in 2005 for multiple jumpering of single connections.

1361. Telstra provided details of the contractor charges that applied until 1 June 2006,⁷⁸³ and the contractor charges that have applied since 1 July 2007.⁷⁸⁴ In its supplementary submission on the finalised Layer 10 report, Telstra provided further estimates of quotes for ULLS MNMs.
1362. These rates are for ULLS MNM connections made, by way of pre-jumpering and cut-over, either in the one visit or in two visits to the exchange. For MNMs where connections are transfers from a Telstra wholesale service or from a line that Telstra is using to supply a ULLS to another access seeker, the ACCC proposed to calculate the efficient cost estimate on the scenario where MNMs were performed in two stages: a pre-jumpering stage and a cutover stage. The rate used was based on the \$[c-i-c] per connection quote for ULLS two-stage MNMs provided by Telstra for 2005-06, appropriately indexed.
1363. The ACCC proposed to adopt Telstra's modelled materials cost in calculating efficient ULLS MNM connection costs. The ACCC's consultation paper sought advice from Telstra on whether third party quotations included an allowance for materials costs.
1364. The ACCC proposed a mark-up of 10 percent on third party contractor rates to cover indirect costs such as contract management costs, in preference to Telstra's previously claimed mark-up of [c-i-c] percent. This reflected the view that when using third party contractors, Telstra would avoid the indirect cost categories that comprise its claimed mark-up. Further, efficiently incurred contract management costs would not represent a significant component of ULLS MNM connection costs.
1365. The ACCC's consultation paper sought the parties' views on these positions.

Submissions from the parties

Jumpering, travel, vehicle and tool costs

1366. Telstra's initial submission advised that third party contractor rates for jumpering have been renegotiated to \$[c-i-c] from 1 July 2007.⁷⁸⁵ Telstra subsequently stated in its submission on the finalised Layer 10 report that third party contractor rates from 1 July 2007 were \$[c-i-c] and \$[c-i-c] for combined MNMs and \$[c-i-c] and \$[c-i-c] for two-stage MNMs.⁷⁸⁶
1367. Optus' initial submission supports the ACCC's use of 3P quotes in calculating efficient ULLS connection costs; however, it considers that the average of the quotes likely overstates Telstra's actual costs. Optus submits that the ACCC should use the combined ULLS MNM activity quote instead of the pre-jumpering and connection quotes.⁷⁸⁷ Optus reiterated this submission in its

⁷⁸³ Telstra, *Primus LSS access dispute – Telstra's submission*, August 2005, Annexure A and Annexure B.

⁷⁸⁴ Telstra, above n 746, p. 6.

⁷⁸⁵ Ibid.

⁷⁸⁶ Telstra, above n 756, p. 6.

⁷⁸⁷ Optus, above n 749, [10.1] – [10.2].

- submission on the finalised Layer 10 report.⁷⁸⁸ Optus submits that it considers that there are no benefits from the higher cost of pre-jumping.
1368. Primus submits that pre-jumping is inefficient and contrary to section 152CR(1), and that the appropriate cost is the ‘ULL combined’ cost of \$12.44. Primus notes that this view is supported by Gibson-Quai’s report.⁷⁸⁹ In its submission on the finalised Brooks report, Primus submits that the combined MNM process represents a more efficient MNM process than the two-stage process. It considers that the two-stage process is not required.⁷⁹⁰ Chime makes an equivalent submission.⁷⁹¹
1369. PowerTel and Request accept the ACCC’s approach and consider it to be conservative.⁷⁹²
1370. Telstra considers that efficient costs should be modelled upon the scenario where two visits are required. Telstra contends that this approach is appropriate because:⁷⁹³
- pre-jumping is performed to reduce congestion at the exchange;
 - pre-jumping enables a higher volume of cutovers to take place within an exchange on the cutover day; and
 - pre-jumping increases MNM efficiency by reducing the time taken to effect MNMs.
1371. Telstra’s supplementary submission also submitted that two-stage MNMs are more efficient.⁷⁹⁴ Telstra submits that this is because the two-stage process offers time savings for contractors and reduces congestion at the exchange. Telstra submits that there is anecdotal evidence that up to three times the number of services per day can be migrated when using pre-jumping. Telstra also submits that single-visit MNMs increase the duration of service interruption for end-user customers.

Materials costs

1372. Telstra confirms that the contractor charges include the cost of materials.⁷⁹⁵
1373. Chime and Primus submit that it is likely that the third party contractor quotes include materials costs and therefore this cost should be removed from the model.⁷⁹⁶

⁷⁸⁸ Optus, *Telecommunications access disputes: Telstra ULLS—Chime, Optus, XYZed, PowerTel, Request and Primus (connections)—Layer 10 connection charges report*, 12 February 2008, p. 3.

⁷⁸⁹ Primus, above n 758, pp. 3-4.

⁷⁹⁰ Primus, above n 762, p. 7.

⁷⁹¹ Chime, above n 762, p. 7.

⁷⁹² PowerTel and Request, above n 748, pp. 41-42.

⁷⁹³ Telstra, above n 755, p. 1.

⁷⁹⁴ Telstra, above n 756, p. 6.

⁷⁹⁵ Telstra, above n 746, p. 8.

1374. PowerTel and Request accept the ACCC's proposed approach.⁷⁹⁷

Mark-up for indirect costs

1375. Telstra considers that the ACCC's proposed mark-up of 10% on third party contractor rates is appropriate.⁷⁹⁸

1376. Optus considers that the proposed mark-up of 10% is more than reasonable.⁷⁹⁹

1377. Primus agrees with the ACCC's preliminary views.⁸⁰⁰

1378. PowerTel and Request accept the ACCC's proposed mark-up and consider it to be conservative.⁸⁰¹

ACCC's views

Jumping, travel, vehicle and tool costs

1379. The ACCC has determined to maintain its proposed approach for calculating jumping and associated cost categories. The ACCC used the 3P contractor rates provided by Telstra to calculate an efficient benchmark for the jumping and associated costs for MNM connections.

1380. In doing so, the ACCC notes that concerns raised about the efficiency of contractor rates for ULLS single connections may apply here as well. The ACCC considered this issue in section 4.2.7 of this statement of reasons, where it considered the appropriate jumping, travel, vehicle and tool costs for ULLS single connections. As with ULLS single connections, given that ULLS MNMs are performed for access seekers alone, Telstra may not have as compelling an incentive to seek the most efficient connection costs for ULLS MNMs, as these flow through to ULLS access seekers only. However, the ACCC does not consider that all of the same concerns which arose with the ULLS single connection quotes would apply to the MNM contractor quotes. In particular, the level of the ULLS MNM quotes would appear to make sense in comparison to LSS MNM quotes, in that the quotes for ULLS MNM activity per service is below LSS MNM quotes, which would be expected given the lesser jumping activity required for such activities. Furthermore, the ULLS MNM quotes are similar to connection charges for PSTN connection activity.

1381. A key area of contention between the parties was the method by which the MNM connection charge should be derived from the various contractor charges that Telstra has negotiated. Different contractor charges apply depending upon whether the MNM involves a combined single visit or occurs in two stages over two visits.

⁷⁹⁶ Chime, above n 747, p. 4; Primus, above n 758, p. 5.

⁷⁹⁷ PowerTel and Request, above n 748, pp. 41-42.

⁷⁹⁸ Telstra, above n 746, p. 6.

⁷⁹⁹ Optus, above n 749, [10.3].

⁸⁰⁰ Primus, above n 758, p. 4.

⁸⁰¹ PowerTel and Request, above n 748, pp. 41-42.

1382. Here, possible approaches that the ACCC could adopt are:

- to model efficient jumpering and related costs on only a single visit / stage process;
- to model efficient jumpering and related costs on a two visit / stage process; or
- to have regard to the charges that apply in both scenarios.

The ACCC has assessed these options against the subsection 152CR(1) matters.

Assessment against subsection 152CR(1) criteria

Paragraph 152CR(1)(a)

1383. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users. This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
1384. On the promotion of competition, a single process would be preferable if this better reflects the forward-looking, efficient cost of performing MNM connections. If so, this would better facilitate efficient entry by service providers in the supply of downstream voice and DSL services. The effect on competition would be most pronounced in marginal exchange areas, where higher MNM charges may preclude entry by ULLS-based suppliers, with consequential effects for the quality and variety of services offered and the price at which services are available in those areas.
1385. The ACCC accepts that access seekers do not require a two-stage process to be followed, and that no access seeker participating in this joint arbitration hearing supports the two-stage approach. However, this does not establish whether, looking forward, one or other approach would be more efficient in a particular instance. The fact that Telstra has negotiated rates for both single-stage and two-stage approaches and that access seekers do not require a two visit / stage process suggests that a single stage process could be more efficient for some MNMs at least. It also indicates that, despite Telstra's submissions, at least some MNMs are taking place as single-stage MNMs. The ACCC notes that the finalised Layer 10 report considers the single-stage and two-stage processes from the perspectives of end-users, exchange technicians, access seekers and Telstra, and concludes that there does not appear to be any compelling efficiency benefits to the two-stage process.⁸⁰²

⁸⁰² Layer 10, above n 778, p. 70-75.

1386. However, the ACCC anticipates that the least cost approach could vary between MNMs, depending upon whether, for example, pre-jumpering would increase or decrease the number of technician days required for that MNM. The ACCC notes Telstra's submissions that there are advantages to the two-stage process relating to the number of connections that can be made in any given day. The least cost approach will also depend, at least in the longer term, on whether contractors would be able and willing to perform all MNMs in a 'single stage / visit' process.
1387. The ACCC does not consider that the any-to-any connectivity objective influences this decision or that the matters identified in paragraph 152AB(6)(a) have a material bearing on this question.
1388. Turning to the efficient use of and investment in infrastructure, the ACCC considers that this will be encouraged where Telstra is able to recover efficiently-incurred costs of MNMs, including a normal commercial return on investment in capital employed. MNM charges above this level for ULLS-based competitors would have the effect of discouraging efficient investment in and use of infrastructure used to supply the ULLS. As a result, the use and investment in downstream services would likely be below efficient levels.
1389. The access seeker parties and Telstra have respectively identified possible causes of inefficiency present in using both a single stage or two stage approach. On the one hand, two stage processes will require unnecessary work on lines withdrawn from a MNM close to the cutover date and will tend towards additional travel costs for the multiple visits to the exchange. On the other hand, a single stage process will extend the cutover phase with the potential for extending end-user service disruptions, reducing the volume of cutovers that take place within an exchange on a cutover day and may in some cases cause congestion at the exchange. In these circumstances, there is no obvious choice as to which process will always be the more efficient process to adopt.
1390. Following on from the discussion regarding the promotion of competition, the ACCC considers that the efficient, forward-looking level of these cost categories would likely fall somewhere in between the contractor charges that apply to the single stage and two-stage processes. This is on the basis that some MNMs will use a single-stage process and others will follow a two-stage process. The actual cost will depend upon the distribution of MNM connections amongst the price points. On the basis that these are evenly distributed, then the actual cost to Telstra will equal the simple average of the four price points provided (which would equal $\$[c-i-c]$). This would compare to the average for single-stage processes of $\$[c-i-c]$ and for two-stage processes of $\$[c-i-c]$. However, the ACCC has decided to take a conservative approach and provide an allowance that exceeds the simple average, to account for the possibility that the distribution of MNM connections might be skewed towards the more expensive price points.
1391. Telstra's legitimate commercial interests, including its interest in recovering its direct costs, would be satisfied by proceeding on the basis that a mix of single and two stage MNMs are performed. Assuming that a two-stage process is always required would lead to charges above those necessary to meet these

interests, while assuming only single stage MNMs will occur would prevent full cost recovery except for all MNMs completed.

1392. For MNMs performed to date, there appears to have been at least some access seeker preference for a two-stage process and it appears that Telstra may have adopted this process in making the majority of its MNMs. This two-stage process may represent a higher quality service as it has the potential to minimise necessary disruptions to end-user service provision and/or to minimise congestion at exchanges.
1393. Looking ahead, the ACCC considers that the efficient level of costs will reflect the scenario where a mix of two-stage and single-stage MNMs are conducted. The ACCC notes that both types are available to Telstra presently and setting MNM charges on a mix of MNM types would be preferable having regard to encouraging efficient investment incentives and promoting competition, as well as encouraging dynamic efficiencies and promoting demand for downstream services. Growing demand will in turn generate economies of scale and scope across production processes which Telstra will be able to exploit. Telstra will be able to recover its costs, as it will be able to arrange for MNMs to be conducted either in a single-stage or two-stage process. Telstra may not be able to recover its costs if the costing was based on a single-stage process only.

Paragraph 152CR(1)(b)

1394. The next matter concerns the legitimate business interests of the access provider and the carrier's or provider's investment in facilities used to supply the declared service. The ACCC's views on the effect of its approach to jumpering costs on these matters have already been discussed as part of the first matter above. It would be contrary to Telstra's legitimate interests to now model costs on only the single-stage approach, to the extent that it must incur higher charges for those MNMs made using a two-stage process. Telstra's legitimate interests would be better met by basing MNM charges on a two-stage process, especially for MNMs previously performed. However, such a charge may also be in excess of the efficient costs of ULLS MNMs and hence be more than necessary to meet Telstra's legitimate interests.

Paragraph 152CR(1)(c)

1395. The next matter is the interests of all persons with rights to use the ULLS. Access seekers' interests lie in being able to compete on their relative merits. Access seekers' interests would tend to be compromised by basing MNM charges on only the charges associated with a two-stage process if they prefer the single-stage process and do not require the two-stage process. This would impede the access seekers' ability to compete on their merits to the extent that the increased costs could not be justified in terms of the associated increase in quality. Relevantly, Optus, Chime and Primus submit that they do not see any benefit to the two-stage process.

Paragraph 152CR(1)(d)

1396. The next matter concerns the direct costs of providing access to the ULLS. Telstra's ability to recover the direct costs of MNMs (including a contribution

to overheads) will be promoted by basing MNM charges on a two-stage process. However, this approach may exceed what is required to recover direct costs, given that at least some MNMs can be conducted in a single-stage process. Relevantly, Telstra has negotiated single-stage ULLS MNM quotes with at least two contractors.

Paragraphs 152CR(1)(e) & (f)

1397. The ACCC does not consider that the next two matters are relevant to this decision. There is no information to suggest that adopting one or the other approach would lead to unsafe practices being used.

Paragraph 152CR(1)(g)

1398. The last matter concerns the economically efficient operation of a carriage service, a telecommunications network or a facility. As noted above, the ACCC considers that should an approach result in MNM charges that are above efficient forward-looking levels, then this would impede competition. If so, Telstra would be able to set above-cost prices for its services, leading to a reduction in the consumption of these services below efficient levels and consequential allocative inefficiencies.

ACCC's overall view on jumpering, travel, vehicle and tool costs

1399. A decision on the appropriate approach to take on jumpering, travel, vehicle and tool costs requires a balancing of the competing considerations under the TPA. The ACCC's ULLS pricing principles are silent on this detail of connection charge calculation. At this time, the ACCC considers that it would be more consistent with the statutory criteria to base MNM connection charges on the scenario where MNMs are conducted using a mix of two-stage MNMs and single-stage MNMs, rather than on only one or the other. However, there is perhaps a stronger case for using only two-visit MNM quotes for MNMs that have already occurred.
1400. Accordingly, the ACCC has set the allowance for jumpering and associated costs for 2005-06 based on the \$[c-i-c] contractor quote that applied to a two-stage process provided by Telstra.⁸⁰³ For MNMs in 2007-08, the ACCC has set this allowance based upon the lesser of the two contractor quotes provided for two-stage processes, being \$[c-i-c] per connection, provided by Telstra in its initial submission.⁸⁰⁴
1401. The ACCC did not consider that it was necessary to have regard to the higher of the two contractor rates for two-stage processes, or to average the two price points.
1402. The ACCC accepts that for certain MNMs, being those involving a two-stage MNM for which the higher cost contractor rate applies, the contractor charge

⁸⁰³ Telstra, *Telstra, Primus LSS access dispute – Telstra's submission, Annexure A and Annexure B*, August 2005.

⁸⁰⁴ Telstra, above n 746, p. 6.

will be higher than the amount allowed by the ACCC. For other MNMs which are connected in a single stage, the contractor charge will be less than the amount allowed by the ACCC. The actual average charge faced by Telstra will depend upon the distribution of MNMs around all of the contracted price points, but a simple averaging of the four price points (\$[c-i-c]) does not suggest that the average charge faced by Telstra will be higher than the amount allowed by the ACCC (\$[c-i-c]), even if these are currently skewed towards the two-stage process. This is particularly so as it appears that access seekers do not prefer the two-stage process and that Telstra should therefore be able to access lower rates.

1403. The ACCC notes that access seekers may prefer that a single-stage process (or a two-stage process) be adopted exclusively for its future MNMs. If so, the parties can negotiate MNM connection charges on that basis.
1404. The ACCC also notes that, for future periods, it would appear that there may be good reasons for MNM charges based on a single-stage process to be adopted. This is due to the access seekers' position that they see little benefit in a two-stage ULLS MNM process and that Telstra could therefore make better use of the lower cost approach.

Materials costs

1405. As contractors incur the cost of materials, they are already reflected in contractors' charges and the ACCC has not included a further and discrete allowance for materials costs.

Mark-up for indirect costs

1406. Given the responses by the parties, the ACCC has maintained the proposed 10 per cent mark-up for indirect costs. The allowance is set by reference to what is considered a reasonable mark-up on contractor charges for efficiently incurred contract management costs. Although there may be some potential for a 10 per cent allowance to be "more than reasonable" or above efficient forward-looking levels, at this time the ACCC does not consider that this is a significant risk. The ACCC's approach is consistent with its ULLS pricing principles.⁸⁰⁵ It is also consistent with the ACCC's approach as set out in the section 4.2.7 of this statement of reasons dealing with ULLS single connections.

Costs for 2005-06, 2006-07 and 2007-08

1407. The ACCC proposed to index the jumpering, travel, vehicle and tool costs, material costs and back-of-house costs for 2006-07 and 2007-08.
1408. Telstra, Chime, Primus, PowerTel and Request do not object to indexation.⁸⁰⁶ Optus submits that it is not appropriate to use 2005-06 figures to measure

⁸⁰⁵ ACCC, *Unconditioned local loop service (ULLS)—final pricing principles*, November 2007, p. 24.

⁸⁰⁶ Telstra, above n 746, p. 8; Chime, above n 747, p. 4; Primus, above n 758, p. 6; PowerTel and Request, above n 748, p. 42.

indexation for future years. Optus considers that the ACCC ought to apply the forecast change in labour rates to set prices for 2007-08.⁸⁰⁷

1409. For jumpering and associated costs, the ACCC has determined to maintain its proposed approach for the 2005-06 costs. For the 2007-08 period, the ACCC has determined to use the contractor rate of \$[c-i-c] provided by Telstra for that period. For the 2006-07 period, the ACCC considers that a reasonable estimate for jumpering and associated costs is the simple average of the 2005-06 and 2007-08 costs.
1410. As the ACCC has determined not to include an allocation for material costs in the ULLS MNM connection charges, it has not indexed these costs.
1411. For back-of-house costs, the ACCC has determined to use *ABS 6345 Labour Price Index 'Ordinary time hourly rates of pay excluding bonuses; Australia; Communication services; Private; All occupations'* to index the labour costs for 2006-07 and 2007-08 using 2005-06 labour costs as the base.⁸⁰⁸

Averaged or de-averaged charges

1412. The ACCC has decided to base MNM charges on a geographically averaged estimate of the efficient costs of providing these MNMs. As noted above in paragraph 1281 of these reasons, the costs of MNMs do not differ between geographic bands. Accordingly, while the ULLS pricing principles state that charges should be geographically de-averaged, the effect of averaging or de-averaging does not lead to a different charge.

Bands 1, 2, 3

1413. The ACCC proposed in its consultation paper to not specify charges to apply to ULLS MNMs in Band 4, as there is little if any demand for these connections. Telstra, Primus, Chime, PowerTel and Request all agree with this approach.⁸⁰⁹ The ACCC has maintained its proposed position.
1414. Telstra states that its costs of completing ULLS MNMs in Band 4 should still be taken into account.⁸¹⁰ It is not necessary to consider this, as the ACCC does not consider that any such MNMs are likely and hence no such costs would be incurred by Telstra.

4.3.9 MNM cost model and connection charges

Introduction

⁸⁰⁷ Optus, above n 749, [10.10].

⁸⁰⁸ The ACCC has used the June 05/06 labour price index to determine the 2006-07 costs and the June 2006/07 labour price index to determine the 2007-08 costs.

⁸⁰⁹ Telstra, above n 746, p. 9; Chime, above n 747, p. 4; Primus, above n 758, p. 7; PowerTel and Request, above n 748, p. 44.

⁸¹⁰ Telstra, above n 746, p. 9.

1415. The ACCC proposed a cost model for ULLS MNM connections that gave effect to the views in the ACCC's discussion paper and sought the parties' views on this model.
1416. The ACCC proposed to adopt a schedule of ULLS MNM connection charges for connections where the ULLS is being connected as part of an MNM involving the transfer of end user data services from a Telstra wholesale PSTN service. As noted above, the schedule proposed different prices to apply to larger-scale and smaller-scale MNMs, on the understanding that contractor charges would differ materially in each case. The different costs were used to create a schedule of prices that contained four tiers of prices depending on the size of the MNM. The ACCC sought the parties' views on the schedule of prices.

Submissions from the parties

1417. Telstra objects to the ACCC's four-tiered cost model as it contends that:⁸¹¹
- the model will increase costs associated with back-of-house activities due to a need for additional calculations by the WCT team of the applicable price to apply;
 - the model does not properly capture the fixed nature of Telstra's efficient project management costs of providing smaller-scale MNMs, and ensure that those are recovered; and
 - the model is unnecessary as Telstra anticipates that the take-up of smaller-scale MNMs is unlikely to be significant.
1418. Telstra submits that it is not practical or reasonable to require Telstra to offer MNMs for migrations of less than 30 services.⁸¹² However it submits that it would not object if the ACCC made a determination that obliged Telstra to offer MNMs for migrations of 30 ULLS services as long as it was given some time to amend its processes to allow for 30 ULLS MNMs.⁸¹³
1419. PowerTel and Request accept the ACCC's model and consider that the results of the ACCC's modelling are conservative.⁸¹⁴
1420. Chime and Primus support the ACCC's model and consider that economies of scale permit MNM charges to at least as low as 20 services. Chime and Primus dispute Telstra's view regarding anticipated low take up of small scale MNMs. Chime and Primus contend that an access seeker will be more likely to undertake a small scale MNM if it is cost effective. Further, Chime and Primus

⁸¹¹ Telstra, above n 746, p. 5

⁸¹² Ibid.

⁸¹³ Telstra, above n 746, p. 4-5.

⁸¹⁴ PowerTel and Request, above n 748, pp. 42-43.

submit that the minimum connection charge per MNM per exchange would ensure that Telstra's costs of providing smaller-scale MNMs are met.⁸¹⁵

ACCC's view

1421. The ACCC has considered the parties' views and a simple cost model that adopts the ACCC's views is attached to these reasons. This model has been further simplified from the model distributed at the DFD stage, as further discussed below. The contents of this cost model are to be treated as commercial-in-confidence, and subject to the confidentiality undertakings given and the directions made, as it reproduces information that is confidential to the parties.
1422. The ACCC has rounded costs estimates in the model. This is the usual approach in setting access charges and recognises that there is a degree of imprecision and margin of error inherent in modelling of this nature. It represents a further conservative measure to ensure that charges are not set below efficient, forward-looking costs. The ACCC considers that the proposed rounding is an appropriate allowance in this regard.
1423. In regard to Telstra's submissions concerning the four-tier structure of the ACCC's DFD prices, the ACCC does not consider that the prices would be overly complex to implement. However the ACCC recognises that there may be some benefits to a simpler cost structure.
1424. In light of this, the ACCC has determined to apply a two-part tariff to ULLS connection charges whereby fixed, project management, back-of-house costs are recovered in a fixed component and other variable per line costs are recovered in a variable component which is charged on the basis of per service connected.
1425. This approach addresses Telstra's concerns about both the difficult implementation of the ACCC's proposed four tier structure and about not recovering fixed project management costs.
1426. The ACCC's DFD proposed to base prices for smaller scale MNMs on the quotes for multiple jumpering of ULLS single connections. The ACCC considers that this is unnecessary in light of Telstra's submission that it would be appropriate to apply the same two-stage ULLS MNM rate for all MNMs of 30 connections or greater. Accordingly it appears that a higher jumpering rate for smaller scale MNMs is unnecessary. The ACCC has also considered whether there would be a need to have regard to a higher rate for MNMs of between 20 and 29 services. However, it considers that this is unnecessary in light of the conservative approach taken by the ACCC to using MNM jumpering quotes, as discussed above. The ACCC also considers that the evidence in Telstra's submission is that a higher jumpering rate for smaller scale MNMs is unnecessary would be applicable to 20-29 service MNMs.

⁸¹⁵ Primus, above n 758, pp. 2-3; Chime, above n 747, p. 2.

1427. The ACCC notes further that the single jumpering quotes incorporate costs for activities, such as cutover testing, that would not be relevant for MNMs.
1428. The following GST-exclusive charges result from the ACCC's cost model, approach to pricing structure and approach to jumpering and associated cost categories, back-of-house costs and indirect costs:

(a) for 2004-05 and 2005-06

Component	Charge
– Fixed amount	\$126.00 (per MNM)
– Variable amount	+ \$24.30 (per connection)

(b) for the period from 1 July 2006 to 30 June 2007

Component	Charge
– Fixed amount	\$130.20 (per MNM)
– Variable amount	+ \$24.60 (per connection)

(c) for the period from 1 July 2007 to 30 June 2008

Component	Charge
– Fixed amount	\$135.60 (per MNM)
– Variable amount	+ \$24.90 (per connection)

MNM disconnection charges

1429. The prices proposed by the ACCC in its consultation paper did not allow ULLS disconnection charges where the ULLS is disconnected as part of a MNM. This reflected the view that any associated costs would be taken into account in setting connection charges for that MNM type. The ACCC has also considered disconnection charges more generally earlier in section 4.2.8 of this statement of reasons, where it considered the costs for single ULLS disconnections.

Submissions from the parties

1430. The parties did not object to this approach being adopted. Telstra considers it unlikely that a disconnection will occur in a MNM.⁸¹⁶ Optus supports the ACCC's proposed approach.⁸¹⁷

⁸¹⁶ Telstra, above n 746, p. 8.

ACCC's view

1431. The ACCC has determined to maintain its proposed approach not to allow ULLS disconnection charges where the ULLS is disconnected as part of a MNM.

4.3.10 Cancellation charges

Introduction

1432. The ACCC proposed to allow cancellation charges to be imposed for cancellations that occur within 20 business days of the scheduled MNM commencing. The proposed charges consisted of a 'standard cancellation charge' of \$0.50 per cancelled service and a further cancellation charge of \$10 per service where a cancellation is made after pre-jumpering work has already been performed as part of the MNM.
1433. The ACCC's consultation paper sought the parties' views on cancellation charges.

Submissions from the parties

1434. Telstra submits that the proposed cancellation charges are too low, do not allow it to recover its costs and are inconsistent with the statutory requirements under Part XIC. Telstra submits that the charges set out in its relevant Access Agreements are reasonable and appropriate.⁸¹⁸
1435. Telstra contends that having a 20 day limit would prevent Telstra from recovering costs reasonably incurred earlier in the process. It considers that the proposed \$0.50 charge per cancellation does not adequately cover Telstra's costs in preparing a MNM. Telstra objects to the ACCC's proposed pre-jumpering cancellation charge as it does not cover costs incurred by Telstra to contractors. Telstra submits that contractors charge Telstra the full [c-i-c] MNM fee when a pre-jumpered service is cancelled rather than just the pre-jumpering fee. In addition, Telstra asks that the ACCC take into account the IDS and WCT costs incurred.⁸¹⁹
1436. Chime, Optus, PowerTel and Request agree with the ACCC's proposed approach and consider the cancellation charges reasonable.⁸²⁰ Primus agrees with the proposed \$0.50 charge per cancellation. However it considers that pre-jumpering is inefficient and that it is therefore inappropriate for Telstra to charge cancellation costs for pre-jumpering.⁸²¹
1437. Following the opportunity to comment on the finalised Layer 10 report, Telstra submitted that it supported the adoption of a cancellation charge based on the

⁸¹⁷ Optus, above n 749, [10.8] – [10.9].

⁸¹⁸ Telstra, above n 746, pp. 11.12.

⁸¹⁹ Ibid.

⁸²⁰ Optus, above n 749, [10.21]; PowerTel and Request, above n 748, p. 44; Chime, above n 747, p. 6.

⁸²¹ Primus, above n 758, p. 8-9.

\$18.70 figure.⁸²² Primus submits that cancellation charges should take account of the fact that some costs are fixed costs attributable to the MNM as a whole rather than per line.⁸²³

ACCC's views

1438. The ACCC has considered the parties' views and has determined to change its approach to cancellation charges. The changes are designed to better ensure that Telstra's fixed back-of-house project management costs are recovered where an MNM is cancelled, as well as ensuring that variable per line connected costs are recovered when a service is cancelled following pre-jumping.
1439. The ACCC has revised its approach to include two separate cancellation charges. The first charge is applicable where an entire MNM is cancelled and is neither calculated on a per line basis nor applicable only where cancelled within 20 days of the MNM. The second charge applies where lines to be connected are cancelled following pre-jumping taking place. The second charge is applicable where either an entire MNM or individual services are cancelled following pre-jumping.
1440. The ACCC has determined that the appropriate cancellation charges are:
- For cancellations of individual services where pre-jumping has not occurred, there is no cancellation charge. The ACCC considers that the costs incurred by Telstra prior to 20 business days of the scheduled cutover date (before pre-jumping has occurred) are fixed costs which are incurred regardless of the number of services to be connected, provided that the entire migration is not cancelled. This view is based on the fact that Telstra claims fixed amounts for IDS group costs and Telstra's description of MNM processes.⁸²⁴ The finalised Layer 10 report similarly considers that the costs leading up to the 20 day list are fixed costs that do not vary with the number of services connected.⁸²⁵ Further, as noted above, the ACCC has determined not to include an allowance for WCTC (now WCT) costs in the ULLS connection charges.
 - For cancellations of individual services where pre-jumping has occurred, the applicable charge is \$20 per service. The ACCC has based this charge on the \$18.70 amount that Telstra has submitted it is charged by third party contractors for pre-jumping and subsequent removal of the pre-jumper wires, plus an allowance of 1.2 minutes of DAC costs for DAC work undertaken leading up to and during the pre-jumping stage. The ACCC has adopted the recommendation of the finalised Layer 10 report that an allowance be made for DAC costs incurred before the completion of jumping, on the basis that some DAC costs would be incurred on average in coordinating pre-jumping activities.⁸²⁶ The charge for cancellation of

⁸²² Telstra, above n 756, p. 7.

⁸²³ Primus, above n 762, p. 7.

⁸²⁴ Telstra, above n 746, p. 9.

⁸²⁵ Layer 10, above n 778, p. 88.

⁸²⁶ Ibid, p. 89.

individual services is only payable where the cancellation occurs after pre-jumping has taken place, which occurs within 20 business days of the scheduled cutover date. The 20 business day condition reflects the view that it would not be necessary for an access provider to pre-jump before this time.

- Where the migration is completely cancelled the applicable charge is \$135.60 per MNM (which is the 2007-08 fixed cost for the MNM). This charge is to apply only where the entire MNM scheduled for an exchange is cancelled and it is payable regardless of when the MNM is cancelled. This allows Telstra to recover its fixed IDS costs per MNM.

1441. The ACCC considers that this revised approach allows Telstra's efficient back-of-house costs to be recovered in the case of cancelled MNMs or MNMs that proceed with fewer services, as the two-part tariff ensures that fixed project management costs are recovered.
1442. The ACCC's views on whether a 'two-stage' (pre-jumping followed by cutover) or 'single-stage' MNM process should be adopted as the efficient MNM process have been discussed earlier in these reasons at paragraph 1381 onwards. At this stage, the ACCC does not accept that it should disallow pre-jumping charges as inefficient. However, it will give further consideration to the issue should it arise in future to ensure that this approach remains appropriate having regard to access seekers' and contractors' preferences for single or two stage MNMs.
1443. The ACCC considers its revised approach to cancellation charges against the legislative criteria below.
1444. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users. This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
1445. The ACCC considers that its approach promotes competition by allowing for the recovery of the efficient, forward-looking cost of cancellations. Where a line is cancelled, a charge is only incurred where pre-jumping work that is related to that particular line has been performed. Similarly, where an access seeker cancels an MNM, it must only pay the costs that will be incurred by Telstra as a result of that cancellation. Accordingly, access seekers will only pay an amount for cancellations commensurate with the cost to Telstra. The ability to obtain ULLS-based supply on appropriate terms will give service providers greater ability to differentiate the price and quality of downstream voice and DSL services that they offer to end-users, which increases the level of competitive rivalry in the supply of downstream services.
1446. Equivalently, under this approach Telstra does not suffer any cost or competitive disadvantage relative to access seekers. In particular, Telstra

- recovers the costs it has incurred when a particular line and/or MNM is cancelled.
1447. The ACCC considers that the cancellation charge approach will not affect any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) relevant to this issue.
1448. Economic efficiency in use of and investment in infrastructure used to provide listed services requires consideration of Telstra's infrastructure as well as the infrastructure of ULLS access seekers. The ACCC considers that efficiencies will be encouraged where Telstra is able to recover the efficiently incurred costs of MNMs, including a normal commercial return on capital employed. These MNM costs include cancellation costs when incurred. The ACCC's approach ensures that Telstra's costs are recovered, and ensures that access seekers seeking to use the ULLS will not be faced with cancellation charges that reflect inefficient costs. Accordingly access seekers can access MNM processes, resulting in the more efficient connection of services, on appropriate terms. This would tend to encourage the efficient use of and investment in infrastructure used to provide the ULLS and downstream DSL services. Setting costs based on efficient levels will better allow existing services to be migrated to the ULLS using the least cost method.
1449. Telstra raised concerns that the cancellation charges proposed in the DFDs might not allow it to recover its cancellation costs.⁸²⁷ In particular Telstra expressed concerns that it would not be able to recover the fixed costs of MNM planning activities, and that it experienced higher costs following pre-jumping than the ACCC had proposed in its consultation paper. The ACCC's revised approach satisfies Telstra's legitimate commercial interests, including its interest in recovering direct costs and exploiting economies of scale and scope. The use of a discrete charge for cancellation of an MNM ensures the recovery of Telstra's fixed costs. The ACCC's approach also takes into account the amount that Telstra is charged by 3P contractors where the connection of a service is cancelled following pre-jumping. Accordingly Telstra's legitimate interests are met by the ACCC's revised approach to cancellation charges.
1450. The ACCC does not consider that considerations related to economies of scale and scope, or to incentives for investment, as set out in section 152AB(6)(b) and (c), are significantly affected by the approach to cancellation charges. However the ACCC considers that, as the revised approach better aligns the cancellation charges with cancellation costs, and thereby encourages competition, dynamic efficiencies will be encouraged. This in turn encourages demand for the ULLS and downstream ULLS, generating economies of scale and scope across Telstra's production processes that it is able to exploit.
1451. The next matter concerns the legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service (paragraph 152CR(1)(b)). This is related closely to the matters in section 152AB(6)(b), as discussed as part of the first matter. The

⁸²⁷ Telstra, above n 746, p. 9.

ACCC considers that its approach ensures that Telstra's legitimate business interests, including in recovering the costs of cancellations, are met.

1452. The next matter involves the interests of all persons who have rights to use the ULLS (paragraph 152CR(1)(c)). Access seekers' interests lie in being able to compete on their merits and in paying charges that reflect efficient forward-looking costs for services. The ACCC considers that its approach meets the interests of access seekers as it ensures that they only pay such costs as are caused by cancellations of lines and/or entire MNMs.
1453. The next matter concerns the direct costs of providing access to the ULLS (paragraph 152CR(1)(d)). In this context it calls for the consideration of whether Telstra can recover the costs that it incurs when a line is cancelled. As noted above in the consideration of Telstra's legitimate interests, Telstra will be able to recover its fixed and variable costs under the cancellation charge approach that has been adopted.
1454. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility. The ACCC does not consider that those two matters are relevant to the decision.
1455. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152CR(1)(g)). The ACCC has also considered efficiency issues above in its consideration of the LTIE. As noted, the ACCC considers that the approach leads to cancellation charges that reflect the efficient forward-looking costs of the cancellations.
1456. In summary, the ACCC considers that the approach is appropriate. In particular, the cancellation charges ensure that Telstra recovers all costs incurred in the case that an access seeker cancels some or all of the lines to be connected in an MNM. Accordingly the ACCC has determined that the cancellation charges are those specified above at paragraph 1440.

4.3.11 Pre-requisites to ordering a MNM and minimum MNM connection charges

Introduction

1457. The ACCC proposed to the parties in its consultation paper that there should be a minimum charge payable for all MNMs and that this should be based upon the cost of a MNM involving 20 services. This is not incurred in addition to the charges calculated by taking the fixed per MNM cost and the per line connected MNM cost. Instead it represents a minimum amount that must be paid per MNM per exchange by the access seeker for all ULLS MNMs.
1458. However, the ACCC proposed to the parties in its consultation paper that there should be no minimum number of services to be connected before a MNM process could be requested. This reflected the view that access seekers are best placed to determine on the basis of the time and cost associated with a MNM process whether it would be preferable to request a MNM.

1459. The ACCC sought the parties' views on pre-requisites to ordering a MNM and minimum MNM connection charges.

Submissions from the parties

1460. Telstra reiterates its contention that it is neither practical nor reasonable to require it to offer MNMs for migrations of less than 30 services. Telstra submits that a minimum of 30 connections should be a precondition for requesting a MNM.⁸²⁸
1461. Chime, Primus, PowerTel and Request agree with the ACCC's proposed approach.⁸²⁹
1462. Optus submits that it is reasonable not to specify a minimum number of services to migrate at an exchange and to leave this to the discretion of the access seeker.⁸³⁰

ACCC's views

1463. The ACCC has decided to maintain the position proposed to the parties. The minimum charge payable for all MNMs is based upon the cost of a MNM involving 20 services.
1464. While access seekers can request MNMs of connections of less than or greater than 20 services, the ACCC considers that 20 services is an appropriate scale for MNMs to be requested. The connection of this number of services can be performed at less cost when done as part of a MNM. This is demonstrated by comparing the cost of an ULLS MNM consisting of 20 connections (\$612, as per the cost model for ULLS MNMs) to the cost associated with making 20 ULLS 'single' connections.
1465. This is not to say that access seekers will always request a MNM for this number of connections at an exchange. As Telstra notes, access seekers may prefer the shorter connection timeframes offered by 'single' connection processes.
1466. The ACCC has not specified a minimum number of connections to qualify for a MNM. The ACCC considers that access seekers should have the flexibility to request a MNM even if there are fewer than 20 services to connect if this is the approach that they consider preferable. However, access seekers will still pay for the fixed cost of connecting 20 services even if they request fewer than 20 services.
1467. The approach taken in setting MNM connection charges means that Telstra's 'largely-fixed' back-of-house costs, and the costs that would be incurred for the jumpstarting work for 20 services, will be recovered in all instances. This is

⁸²⁸ Telstra, above n 746, pp. 5, 9.

⁸²⁹ Chime, above n 747, p. 5; Primus, above n 758, p. 7; PowerTel and Request, above n 748, p. 44.

⁸³⁰ Optus, above n 749, [10.12].

because of the inclusion of the fixed cost component in the MNM connection charge schedules.

1468. The ACCC considers its proposed approach against the legislative matters below.

Assessment against subsection 152CR(1) criteria

Paragraph 152CR(1)(a)

1469. In applying the subsection 152CR(1) matters, the first matter concerns the long term interests of end-users. This calls for consideration of a number of factors identified in section 152AB, namely the objective of promoting competition, the objective of achieving any-to-any connectivity, the objective of encouraging the economically efficient use of and the economically efficient investment in infrastructure and subsidiary matters (paragraphs 152AB(2)(c)-(e), sub-section 152AB(4), paragraphs 152AB(6)(a)-(c), subsection 152AB(7A), and subsection 152AB(8)).
1470. The ACCC considers that its approach promotes competition by removing obstacles to service providers migrating services to the ULLS and by providing for the migration of services at an efficient, forward-looking cost. ULLS-based supply will give service providers greater ability to differentiate the price and quality of downstream voice and DSL services that they offer to end-users, which increases the level of competitive rivalry in the supply of downstream services.
1471. The minimum scale of MNMs will not affect any-to-any connectivity. Nor are the matters identified in paragraph 152AB(6)(a) relevant to this issue.
1472. Economic efficiency in use of and investment in infrastructure used to provide listed services requires consideration of Telstra's infrastructure as well as the infrastructure of ULLS access seekers. Restricting MNM processes to larger scale migrations, when MNM processes can result in more efficient outcomes for smaller scale migrations, would tend to discourage the otherwise efficient use of and investment in infrastructure used to provide the ULLS and downstream DSL services.
1473. This is because those restrictions would delay the completion of MNMs (until sufficient demand is accumulated within the exchange) or prevent existing services being migrated to the ULLS using the least cost method. Uncertainty or delay will discourage take up of the ULLS and use of Telstra's ULLS ordering systems as well as discourage the efficient investment in access seekers' DSLAMs and other infrastructure. Requiring larger scale MNMs would not promote economic efficiency in the use of Telstra's infrastructure, given that the ACCC's pricing approach takes account of Telstra's fixed costs of providing MNMs.
1474. This approach satisfies Telstra's legitimate commercial interests, including its interest in recovering direct costs and exploiting economies of scale and scope. The minimum MNM exchange charges and the MNM connection charges permit Telstra to recoup the costs associated with MNMs, and in all cases

Telstra recovers at least the costs of making an MNM for 20 services. By better aligning the charge for smaller scale migrations with cost, and thereby promoting competition, dynamic efficiencies will be encouraged. This in turn will stimulate demand for the ULLS and downstream services, thus generating economies of scale and scope across Telstra's production processes. Telstra is able to exploit these economies. The approach also allows Telstra to exploit the economies of scale in making ULLS connections through MNMs.

Paragraph 152CR(1)(b)

1475. The next matter concerns the legitimate business interests of the access provider, and the carrier's or provider's investment in facilities used to supply the declared service. This is related closely to the matters in section 152AB(6)(b), as discussed as part of the first matter. The ACCC considers that a minimum scale of 30 services for an ULLS MNM is not necessary to satisfy these interests, and that Telstra's legitimate interests are not compromised by setting a minimum MNM cost equivalent to the cost of connection of 20 services.

Paragraph 152CR(1)(c)

1476. The next matter involves the interests of all persons who have rights to use the ULLS. The ACCC's approach is consistent with access seekers' interests in being able to compete in downstream markets on the basis of the price and quality of the services they can offer.

Paragraph 152CR(1)(d)

1477. The next matter concerns the direct costs of providing access to the ULLS. In this context it calls for the consideration of whether Telstra can recover the costs of smaller scale MNMs. Telstra will be able to recover its fixed and variable costs under the pricing schedule that has been adopted regardless of how many services are requested in a MNM.

Paragraphs 152CR(1)(e) & (f)

1478. The next two matters are the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else; and the operational and technical requirements necessary for the safe and reliable operation of a carriage service, or a telecommunications network or a facility. The ACCC does not consider that a higher minimum MNM charge or a higher minimum services prerequisite are required to ensure the recovery of costs that Telstra has incurred in making any enhancements to MNM processes. The ACCC does not consider that minimum MNM charges that are higher than those it has determined or a minimum number of services as a MNM pre-requisite are necessary to promote the safe and reliable operation of the network or facilities.

Paragraph 152CR(1)(g)

1479. The last matter is the economically efficient operation of a carriage service, a telecommunications network or a facility. The ACCC has also considered

efficiency issues above in its consideration of the LTIE. The ACCC considers that the economically efficient operation of carriage services and associated networks and facilities of the access provider and access seekers will be encouraged by smaller-scale migrations using MNM processes. This is because it will promote competition in downstream services by removing obstacles to connecting the ULLS while ensuring that the efficient costs of connecting the ULLS are able to be recovered. Greater competition in the supply of downstream DSL services will encourage efficiency in the supply of those services.

ACCC's overall view on pre-requisites to ordering a MNM and minimum MNM connection charges

1480. After considering its proposed approach against the legislative matters, the ACCC considers that its proposed approach is most appropriate, as it is more consistent with the legislative matters than the other approaches.

4.3.12 Commencement date, expiry date and interest

1481. The ACCC has backdated the ULLS MNM connection charges. The balance of the terms that the ACCC has specified in relation to ULLS MNMs will commence when the final determination comes into effect. These terms are to apply until 30 June 2008. Interest is payable on any over or under-payment that has occurred. The term of backdating and the reasons for this approach have been discussed previously.

4.3.13 Changes to draft final determination

1482. The ACCC provided a DFD to the parties for comment. Some of the terms specified in the final determination differ to some extent to those proposed at the DFD stage. These changes reflect revised cost data, the approach to backdating and the approaches to cancellation charges and forecasting timeframes. The changes have been discussed earlier in these reasons.
1483. Telstra also suggests some amendments to the terms of the final determination. Telstra objects to the definition of MNM on the basis that it is not reasonably precise. Telstra considers that the definition is too broad and may cover migrations not contemplated under the MNMs service schedule. Telstra contends that the definition of MNM should be that agreed to in the access agreements between the parties.⁸³¹ Optus considers that Telstra's concerns will have no practical impact on the prices set.⁸³² Primus and Chime object to Telstra's submission.⁸³³ PowerTel and Request accept the ACCC's description of MNM.⁸³⁴

⁸³¹ Telstra, above n 746, p. 4.

⁸³² Optus, above n 760, [6.2].

⁸³³ Chime, above n 751, p. 2; Primus, above n 750, p. 2.

⁸³⁴ PowerTel and Request, *Unconditioned Local Loop Service, Submissions in reply of PowerTel Limited and Request Broadband Pty Ltd in relation to the making of a final determination*, 13 September 2007, p. 47.

1484. The ACCC considers the definition of MNM that it has used in this determination is appropriate. It does not consider that the definition is too broad for the purposes of the final determination. The ACCC has not adopted the definition of MNM that Telstra proposed, as this definition includes elements, such as the minimum number of services, which the ACCC considers inappropriate. The ACCC notes that the operative clauses of the final determination provide further detail of the type of MNM to which the clauses apply.
1485. The decision not to backdate certain of the charges has meant that it is not necessary to specify charges to apply for the 2004-05, 2005-06 and 2006-07 financial years for all charges. Any 'obsolete' charges have been deleted.
1486. Minor drafting changes were made to make clear that parties can override the operation of the final determination terms by subsequent agreement. A change was also made to make clear that, like the MNM connection charges, the MNM minimum charge is not to apply to Band 4 MNMs. A change was also made to clarify that the MNM could include the transfer of services from a Telstra wholesale PSTN and/or ADSL service.