



Australian
Competition &
Consumer
Commission

**Public inquiry to make final access
determinations for the declared fixed line
services**

Discussion paper

April 2011

Public version



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List of abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
AD	access determination
ADC	access deficit contribution
ADSL	asynchronous digital subscriber line
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ANZSIC	Australian and New Zealand Standard Industrial Classification
BBM	building block model
CACS Act	<i>Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010</i>
CAN	customer access network
CAPM	capital asset pricing model
CCA	<i>Competition and Consumer Act 2010</i>
CCC	Competitive Carriers' Coalition
CGS	Commonwealth Government Security
CMUX	customer multiplexer
CPI	consumer price index
CSP	carriage service provider
c-i-c	commercial-in-confidence

DAC	depreciated actual cost
DHC	depreciated historic cost
DORC	depreciated optimised replacement cost
DRP	debt risk premium
DSL	digital subscriber line
DSLAM	digital subscriber line access multiplexer
DTCS	domestic transmission capacity service
EMOU	end minute of use
ESAs	exchange service areas
FAD	final access determination
FD	final arbitration determination
FHoA	Financial Heads of Agreement
FLSM	Fixed Line Services Model
HFC	hybrid fibre-coaxial
IAD	interim access determination
IHC	indexed historic cost
IMF	International Monetary Fund
IPART	Independent Pricing and Regulatory Tribunal
ISP	internet service provider
iVULLS	intact vacant ULLS
LCS	local carriage service

LSS	line sharing service
LTIE	long term interests of end-users
MEA	modern equivalent assets
MJA	Marsden Jacob Associates
MNM	managed network migration
MRP	market risk premium
MSAN	multi-service access node
MTAS	mobile termination access service
NBN	national broadband network
NEL	National Electricity Law
OECD	Organisation for Economic Co-operation and Development
ORC	optimised replacement cost
POI	point of interconnection
PPI	producer price index
PSTN OA	public switched telephone network originating access service
PSTN TA	public switched telephone network terminating access service
PTRM	Post-tax revenue model
RAB	regulatory asset base
RAF	regulatory accounting framework
RBA	Reserve Bank of Australia
RBS	Royal Bank of Scotland

RKR	record keeping rule
RMRC	retail minus retail cost
SAOs	standard access obligations
SIOs	services in operation
TPA	<i>Trade Practices Act 1974</i>
Tribunal	Australian Competition Tribunal
TSLRIC	total service long run incremental cost
ULLS	unconditioned local loop service
VHA	Vodafone Hutchison Australia
VoIP	Voice over Internet Protocol
VULL	vacant unconditioned local loop
WACC	weighted average cost of capital
WLR	wholesale line rental service
YTM	yield to maturity

Executive summary

This discussion paper commences a public inquiry to make final access determinations (FADs) for the declared fixed line services.¹ The discussion paper also sets out the methodology, assumptions and model inputs used by the Australian Competition and Consumer Commission (ACCC) to estimate draft FAD prices.

Background: legislative framework

The ACCC has recently consulted extensively on an appropriate pricing methodology for the declared fixed line services as part of its pricing principles review.² That consultation process was suspended in December 2010 because amendments to the *Competition and Consumer Act 2010* (CCA) meant that the ACCC was no longer required to make pricing principles determinations for declared services.³

The amended regime requires the ACCC to make FADs for all declared services. The ACCC must commence a public inquiry into the making of an FAD for an existing declared service at least six months prior to the expiry of the interim access determinations (IADs).⁴

An access determination (AD), including an FAD provides a base set of terms and conditions that access seekers can rely on if they are unable to come to an agreement with an access provider on the terms and conditions of access to a declared service.

Further detail on the new access regime and criteria for making FADs can be found in chapter 3 of this discussion paper.

IADs for the declared fixed line services

In March 2011 the ACCC made IADs backdated to take effect from 1 January 2011. The IADs included both interim price and non-price terms for all of the declared fixed line services. The IADs expire on 31 December 2011.

The ACCC utilised the Fixed Line Services Model (FLSM), which was initially developed during the earlier pricing principles review, to estimate access prices based on a building block model (BBM) pricing methodology. Subsequent revisions to the FLSM resulted in the prices included in IADs being different to the draft indicative prices published in September 2010.

The ACCC issued a Statement of Reasons to accompany the IADs setting out the basis for its decision.⁵

¹ The declared fixed line services are the: line sharing service (LSS); local carriage service (LCS); public switched telephone network originating access service (PSTN OA); public switched telephone network terminating access service (PSTN TA); unconditioned local loop service (ULLS) and wholesale line rental (WLR).

² The pricing principles review is outlined in further detail at sections 4.2 of this discussion paper.

³ Following the repeal of sections 152AQA and 152AQB.

⁴ The expiry date for the IADs for the declared fixed lines services is 31 December 2011.

⁵ See ACCC website at: <http://www.accc.gov.au/content/index.phtml?itemId=975757>.

Process for making FADs

In developing its pricing framework and estimating draft prices for the discussion paper, the ACCC has built on its previous work. It has taken into account submissions to its previous extensive consultations.

After receiving submissions on the discussion paper and the draft FADs, the ACCC plans to publish a Final Report and make FADs for the declared fixed line services. The ACCC is taking this approach in recognition that many of the pricing issues are substantially resolved. This approach will expedite the inquiry and provide the industry with certainty.

The ACCC recognises that it has not recently consulted on non-price issues. Some non-price issues may arise during this consultation process that will require further and more detailed consideration. The ACCC will therefore adopt a flexible approach to dealing with any such issues and may consider varying the FADs, if necessary.

In this discussion paper the ACCC:

- explains how the ACCC proposes to implement the BBM pricing approach
- provides a detailed explanation of the basis for estimating the draft FAD prices
- explains the ACCC's substantial revisions of the FLSM since the release of the *Draft Report—Review of the 1997 telecommunications access pricing principles for fixed line services* (September 2010 Draft Report)
- addresses concerns expressed in submissions to the September 2010 Draft Report by Telstra and access seekers that the ACCC had not provided sufficient explanation of its pricing methodology, assumptions and forecasts used to estimate prices, and
- sets out the issues for the FAD public inquiry, including non-price terms and other issues.

Proposed pricing approach for the FADs

The ACCC stated from the outset of its earlier consultation process that its preference was to move from its previous pricing methodologies to a new BBM pricing methodology. There has been broad industry acceptance of this proposed change.

The ACCC proposes to implement the BBM using the FLSM to calculate prices for the declared fixed line services for the purposes of making FADs. The ACCC notes that the approach proposed for estimating prices for the FADs is consistent with the approach taken in relation to the IADs.

Implementation of a BBM

To implement a BBM, the ACCC must establish an initial value of the regulated asset base (RAB). The initial RAB value is then 'locked in' and rolled forward by actual changes in the value of the asset base. The BBM accounts explicitly for each cost category or 'building block' faced by the regulated business, including:

- operating expenditure
- return of capital
- return on capital, and
- tax liabilities.

Each of the building blocks are added together to determine the business's total revenue requirement. The revenue requirement is then allocated to services provided using Telstra's network and prices are derived for each of the declared fixed line services.

The initial RAB

The ACCC considers that a suitable range of RAB values is set by the depreciated historic value of Telstra's investments in network assets (that is, depreciated actual cost (DAC)) and by depreciated optimised replacement cost (DORC).

Given the inherent limitations of DAC, DORC and current accounting approaches in determining a RAB value, the ACCC has also considered a number of other factors to assist it in proposing an initial RAB values within the suitable range of potential values.

In developing its proposed initial RAB value, the ACCC has used the DAC value that forms the lower bound of the suitable range as a starting point. The DAC value is derived from Telstra's RAF accounts. The ACCC then made two adjustments to the starting point RAB value after taking into account submissions and other considerations.

The first adjustment was to index land values by the consumer price index (CPI) to reflect appreciation of land values over time. The second adjustment was to increase the value assigned to the 'ducts and pipes' asset class by \$1.44 billion. This approach resulted in an initial RAB value of \$17.75 billion as at 1 July 2009, i.e. the first financial year of the FLSM. (The approach is discussed in chapter 5 of the discussion paper.)

The increment to the 'ducts and pipes' asset class achieved ULLS price stability by 'tying' the averaged Band 1-3 price in the IADs to the previous indicative Band 2 price of \$16. Prices for the other declared fixed line services were not held stable but were calculated to be consistent with the SIO-weighted average ULLS Band 1-3 price of \$16. Subsequently, prices are not held stable but are estimated in the FLSM on the basis of the forecast costs of providing them.

As noted above, the initial RAB value of \$17.75 billion applied on 1 July 2009. To estimate draft prices to apply from 1 July 2011, the RAB needs to be rolled forward by two years from its initial value as at 1 July 2009. Because depreciation exceeds capital expenditure in 2009-10 and 2010-11 (due to declining investment in the network and a very small positive impact from inflating land values), the RAB value falls over time. The opening RAB value at the commencement of the proposed FAD regulatory period is \$15.9 billion (of which \$1.3 billion represents the depreciated value of the increment to the 'ducts and pipes' asset class).

The ACCC has accepted Telstra's advice on the network assets used to supply the declared fixed line services and revised the asset classes included in the RAB. The ACCC has also revised the asset lives for some asset classes based on additional, more detailed information provided by Telstra. However, the ACCC has not accepted Telstra's proposal to truncate the lives of assets that will no longer be used after the National Broadband Network (NBN) is rolled out.

Capital expenditure

Capital expenditure forecasts

Telstra provided updated information on its capital expenditure forecasts following the release of the IADs. The ACCC has taken this additional information into account and revised its capital expenditure forecasts for the purposes of estimating the draft prices included in this discussion paper.

The ACCC considers that Telstra's forecast of a small real decline in capital expenditure over the regulatory period is reasonable. The ACCC expects that Telstra's investments are likely to focus on 'baseline' projects needed to maintain its current network and cater for population growth and that Telstra is unlikely to undertake significant discretionary investments in the fixed line network, due to the roll-out of the NBN. Consequently, the ACCC has adopted Telstra's updated capital expenditure forecasts in estimating draft prices for 2011-12 to 2015-16.

The weighted average cost of capital (WACC)

The ACCC has used a real vanilla WACC in the FLSM to calculate Telstra's return on capital.

In estimating the WACC, the ACCC has taken into account submissions and up-to-date information on the WACC parameters. The ACCC has estimated a nominal value of 9.04 per cent (6.25 per cent real).

Regulatory depreciation

The ACCC has adopted straight line depreciation in estimating prices. It does not consider that front-loading or back-loading of depreciation is warranted. The ACCC expects that payments under the proposed deal between Telstra and NBN Co will compensate Telstra for unrecovered depreciation on assets no longer used to provide the declared fixed line services following the roll-out of the NBN.

Operating expenditure

The ACCC has reduced its operating expenditure forecasts for the customer access network (CAN) to place greater weight on the recent declining expenditure trend in these expenditures. In the absence of operating expenditure forecasts by Telstra, the ACCC has accepted submissions that Telstra's most recent actual expenditure (for 2009-10) represents the best basis for forecasting future expenditure. The ACCC has assumed that direct operating expenditure in real terms will remain constant at this level over the regulatory period.

For the Core network, the ACCC considers that the five year average of recent actual expenditure in real terms remains the most appropriate basis for forecasting operating expenditure over the regulatory period. In contrast to CAN operating costs, operating expenditure on the Core network has been largely stable in real terms over recent years.

The ACCC has revised its estimated mark-up for indirect operating expenditures to 80 per cent, following consideration of further information provided in submissions.

Cost allocation factors

Each service's share of the aggregate revenue requirement is calculated by applying cost allocation factors to the total operating, capital and tax costs associated with each of the asset classes in the FLSM. The cost allocation factors represent the share of costs incurred in supplying a particular service.

Since the September 2010 Draft Report, the ACCC has made a number of adjustments to the cost allocation factors used in the FLSM (as noted in chapter 10 of this discussion paper).

The cost allocation factors used to allocate the costs of the ‘ducts and pipes’ and ‘copper cables’ asset classes to the ULLS and WLR service are now adjusted for the differential costs of providing those services in the four geographic bands.

Cost allocation factors have also been developed for new asset classes added to the FLSM. The new asset classes are: ‘network land’, ‘network buildings and support’, ‘indirect capital assets’ and ‘other communications plant and equipment’.

Some adjustments have been made to other cost allocation factors as a result of better and updated information.

The ACCC has not accepted Telstra’s argument that the cost allocation factors for the declared fixed line services should be adjusted to reflect declining total demand for fixed line services. The ACCC considers that the risk premium included in the WACC appropriately compensates Telstra for the commercial risks associated with reduced customer demand and loss of market share.

Finally, the ACCC notes that its methodology for adjusting the cost allocation factors to reflect forecast changes in demand will generally offset any demand forecasting errors, including those related to customer migration to the NBN. The ACCC’s cost allocation adjustment methodology effectively holds unit costs constant (further details are provided in chapter 10 of this discussion paper).

Geographic cost-based pricing

The ACCC acknowledges that the lack of geographic cost adjustment to the cost allocation factors for the ULLS and WLR in the September 2010 Draft Report caused estimated ULLS costs to be overstated relative to WLR and Telstra’s retail costs.

The ACCC has now developed a methodology for adjusting the allocation of costs to CAN services to reflect the differential costs of providing services in the different geographic bands (see chapter 11 of this discussion paper). The ACCC proposes to average Band 1 to 3 ULLS prices and set a separate Band 4 ULLS price, using the same approach as adopted in the IADs.

The ACCC proposes to maintain its current approach of setting nationally averaged WLR, LCS and LSS prices.

In setting PSTN OTA charges in the FADs, the ACCC proposes to set a national average PSTN OTA price. It will be open to access seekers to negotiate appropriate disaggregated charges.

Inclusion of the LSS in the FLSM

In response to an ACCC request in October 2010, Telstra provided information on the specific costs of supplying the LSS. The ACCC is now able to estimate LSS prices within the FLSM.

Demand forecasts

The ACCC has developed revised demand forecasts for 2010–11 to 2015-16. However, the ACCC has not received sufficiently detailed or certain information on the planned migration timetable to adjust its demand forecasts for migration to the NBN. Should better information become available about the magnitude and timing of

the migration process prior to finalising prices for the FADs, the ACCC will adjust its demand forecasts.

The ACCC notes that its methodology for adjusting the cost allocation factors to reflect changes in demand for particular services (see chapter 10) will generally limit the impact on unit costs (and therefore prices) of changes in the NBN migration schedule or demand forecasting errors.

The ACCC's revised demand forecasts are at chapter 13 of this discussion paper.

Draft FAD prices for the declared fixed line services

The ACCC has estimated draft prices from the FLSM for a proposed five-year regulatory period expiring on 30 June 2016. The ACCC has calculated the draft prices by taking a simple average of the prices estimated by the FLSM for the financial years, 2011-12 to 2015-16 (see chapter 14). The draft access prices have been derived from the FLSM based on assumptions consistent with those used in estimating prices for the IADs.

	Prices from 1 Jan 2011-30 June 2011	Prices from 1 July 2011-30 June 2016
ULLS Band 1 to 3 (\$/month)	16.00	16.75
ULLS Band 4 (\$/month)	48.00	50.11
WLR (\$/month)	22.10	22.47
PSTN (cents/minute)	1.0	1.0
LCS (cents/call)	9.1	8.7
LSS (\$/month)	1.80	1.80

The ACCC proposes not to backdate its FAD prices to 1 January 2011. It proposes to apply the draft FAD prices included in this discussion paper from 1 July 2011, which is the commencement date of the proposed five-year regulatory period. The ACCC proposes to include a schedule in the FADs which incorporates the prices in the IADs for the period 1 January 2011 to 30 June 2011. This six month period is a transitional regulatory period.

The ACCC considers that this proposed action will promote a smooth transition from the IAD prices to the FAD prices. It will also promote price certainty for that period of time and avoid the transaction costs to Telstra and access seekers of accounting for revised prices in their billing systems.

On the basis of the assumptions currently used in the FLSM, the draft prices differ from the IAD prices for the following main reasons:

- The draft price for the ULLS increases in nominal terms, but declines in real terms. This reflects the assumption that operating expenditure is constant in real terms (and increasing in nominal terms) while real capital costs are declining due to falling CAN investment over 2011-12 to 2015-16.
- The draft price for the WLR decreases in both nominal and real terms, as two asset classes 'pair gains systems' and 'local switching' are fully depreciated by 2013-14 and 2012-13 respectively, and are not replaced by new assets. These two asset classes are not used to provide the ULLS.

- The draft LSS price declines in nominal and real terms. This reflects the assumption that LSS specific costs remain constant in real terms between 2011-12 and 2013-14 while LSS demand continues to grow, resulting in lower unit costs.
- The draft prices for LCS and PSTN OTA both decline in nominal and real terms. A major component of the costs of providing these services is switching costs. Based on the asset lives assumed in the FLSM, switching assets are expected to be fully depreciated by 2011-12. Forecast investment in replacing the circuit switches used on the copper network is very low because electronic switches will be required for compatibility with the NBN fibre network.

Connection and disconnection charges

In calculating connection and disconnection charges for the IADs, and draft charges for 2011-12 to 2015-16, the ACCC has indexed connection and disconnection charges by actual (where available) or forecast changes in the CPI.

The ACCC's proposed connection and disconnection charges are at chapter 15 of this discussion paper.

Non-price issues

Non-price terms and conditions

The ACCC is proposing to include non-price terms and conditions relating to access to the declared fixed line services in the FADs.

The ACCC is seeking submissions on whether the non-price terms included in the IADs are appropriate for inclusion in the FADs. The non-price terms in the IADs were based on non-price terms and conditions contained in the ACCC's *Model Non-Price Terms and Conditions Determination 2008* (2008 Model Terms) and also contained in more recent final determinations made in access disputes. The ACCC consulted with industry before making the 2008 Model Terms, and consulted with a number of parties when making the arbitral final determinations.

The ACCC is also seeking submissions on whether to include non-price terms in the relevant FADs in relation to liability (risk allocation), intact vacant ULLS (iVULLS) and facilities access provisions. These non-price terms were not included in the IADs as the ACCC considered that industry should be consulted before their inclusion in an AD.

Part B of this discussion paper outlines the issues regarding non-price terms and conditions in the FADs.

Geographic exemptions for the WLR, LCS and PSTN OA services

The ACCC is seeking submissions on whether the effect of the exemption determinations made under the previous Part XIC access regime should be incorporated in the FADs for the WLR, LCS and PSTN OA services.

Part C of this discussion paper outlines the issues regarding incorporating the effect of the exemption determinations in the FADs for the WLR, LCS and PSTN OA services.

NBN-based wholesale services

The ACCC is seeking submissions on whether the FADs should apply to wholesale services which are supplied by NBN access seekers using the NBN access network. If the FADs for the relevant declared services cover NBN-based wholesale services, the

ACCC will need to determine an appropriate method of ascertaining the price for those services.

Part D of this discussion paper outlines the issues regarding whether NBN-based wholesale services should be covered by the FADs for the relevant declared fixed line services.

Fixed principles provisions

The ACCC proposes to make fixed principles provisions to provide certainty for industry on how the ACCC will implement a BBM approach in future regulatory periods (see chapter 25 of this discussion paper).

Certainty over time of the pricing framework will assist industry participants in their business and investment planning during the transition to the NBN.

Part E of this discussion paper outlines the relevant legislation in relation to fixed principles provisions, and seeks industry submissions on the fixed principles provisions proposed in the draft FADs.

1 Introduction

This discussion paper commences the public inquiry under Part 25 of the *Telecommunications Act 1997* (Cth) into making final access determinations (FADs) for the six declared fixed line services under section 152BC of the *Competition and Consumer Act 2010* (CCA).

The discussion paper sets out the Australian Competition and Consumer Commission's (ACCC) views on the content of the FADs for the declared fixed line services and calls for industry submissions. It includes draft FADs for these services. This discussion paper includes the ACCC's proposed approach to:

- pricing for the declared fixed line services
- non-price terms for access to the declared fixed line services
- exemptions from the standard access obligations (SAOs) in the FADs for certain services or exchange service areas (ESAs)
- fixed principles provisions.

The declared fixed line services are the:

- line sharing service (LSS)
- local carriage service (LCS)
- public switched telephone network originating access service (PSTN OA)
- public switched telephone network terminating access service (PSTN TA)⁶
- unconditioned local loop service (ULLS)
- wholesale line rental (WLR).⁷

1.1 Background

The telecommunications access regime contained in Part XIC of the CCA was amended with effect from 1 January 2011 by the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010* (CACs Act). The amendments replace the previous negotiate/arbitrate framework with a range of different access mechanisms, including up-front access determinations (ADs).

The amended regime requires the ACCC to make FADs for all declared services. In March 2011, the ACCC made interim access determinations (IADs) for each of the declared fixed line services, which were backdated to take effect from 1 January 2011. The IADs expire on 31 December 2011. Therefore the ACCC must commence a public inquiry into making FADs for the declared fixed line services by 1 July 2011.⁸

An AD (including an FAD) provides a base set of terms and conditions that access seekers can rely on if they are unable to come to an agreement with an access provider on the terms and conditions of access to a declared service. If parties do come to an

⁶ PSTN OA and PSTN TA are together referred to as 'PSTN OTA'.

⁷ See ACCC, *Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR: Final Decision*, July 2009. Appendix A to this discussion paper contains a short description of each the declared fixed line services.

⁸ Subsection 152BCI(2) of the CCA.

agreement on terms and conditions of access, their access agreement will prevail over the AD to the extent of any inconsistency.⁹

Where ADs specify terms and conditions of access they must include terms and conditions relating to price (or a method of ascertaining a price). Although not compulsory, the ACCC proposes to include non-price terms in the FADs for the declared fixed line services.¹⁰

The ACCC recently consulted extensively on an appropriate pricing methodology for the declared fixed line services as part of its pricing principles review.¹¹ The ACCC had proposed a shift from its previous pricing methodologies (total service long run incremental cost (TSLRIC+) and retail minus retail cost (RMRC)) to a building block model (BBM) pricing methodology. The ACCC developed the Fixed Line Services Model (FLSM) to estimate access prices based on a BBM pricing methodology. That consultation process was suspended in December 2010 because amendments to the CCA meant that the ACCC was no longer required to make pricing principles for declared services.¹²

However, the ACCC proposes to have regard to the information collected during the pricing principles consultation to inform its considerations on pricing for the declared fixed line services in the FADs. The ACCC proposes to set the prices in the FADs based on a BBM pricing methodology with regard to the price estimates produced by the FLSM.

The CCA requires the ACCC to consider certain factors when making an FAD, including the long-term interests of end-users (LTIE), the legitimate business interests of carriers and carriage service providers and the direct costs of providing access to the declared services.¹³ The ACCC may also take into account any other matters that it thinks are relevant when making an FAD.¹⁴

The ACCC made IADs on 2 March 2011 in order to provide industry with some certainty until the FADs for the declared fixed line services are made. Once an FAD is made for a declared service, an IAD relating to that service is automatically revoked¹⁵ and no access disputes can be notified to the ACCC in relation to that service (see section 4.5 for further information regarding the proposed transitional arrangements from the IADs to the FADs).¹⁶

Compliance with an FAD is both a carrier licence condition and a service provider rule.¹⁷ A breach of either a carrier licence condition or a service provider rule may lead to a pecuniary penalty of up to \$10 million for each contravention.¹⁸ Private enforcement of an FAD is available in the Federal Court.¹⁹

⁹ Section 152BCC of the CCA.

¹⁰ See section 152BC of the CCA.

¹¹ The pricing principles review is outlined in further detail at sections 4.2 of this discussion paper.

¹² Following the repeal of sections 152AQA and 152AQB.

¹³ Subsection 152BCA(1) of the CCA.

¹⁴ Subsection 152BCA(3) of the CCA.

¹⁵ Subsection 152BCF(9A) of the CCA.

¹⁶ Items 207(2) and (3) of the CACS Act.

¹⁷ Sections 152BCO and 152BCP of the CCA.

¹⁸ Section 570 of the *Telecommunications Act 1997*.

¹⁹ Section 152BCQ of the CCA.

1.2 Structure of this paper

This discussion paper is structured as follows:

Chapter 2 sets out the consultation process for the FADs for fixed line services.

Chapter 3 sets out the legislative criteria relevant to making an FAD.

Part A (Chapters 4 to 16) sets out proposed price terms for the FADs.

Part B (Chapters 17 to 20) sets out proposed non-price terms for the FADs.

Part C (Chapters 21 to 23) sets out the ACCC's proposed exemptions for the FADs.

Part D seeks industry submissions on whether national broadband network (NBN) - based wholesale services should be covered by the FADs for certain declared fixed line services.

Part E (Chapters 24 to 25) discusses the ACCC's proposed fixed principle provisions.

Appendix A contains a summary of the service descriptions for the six declared fixed line services for which the ACCC proposes to make FADs.

Appendix B lists the submissions made to the December 2009 Discussion Paper and September 2010 Draft Report.

Appendix C contains the draft FAD instruments for the six declared fixed line services.

2 Consultation process for final access determinations

The ACCC is required to commence a public inquiry into making an FAD for each currently declared service. Once a public inquiry has started, the ACCC must make an FAD within six months. However, this period may be extended by a further six months if the ACCC explains the reasons for the extension.²⁰

With this discussion paper, the ACCC is publishing draft FADs which contain price and non-price terms. The draft FADs also contain fixed principle provisions regarding the mechanism for determining prices for the declared fixed line services beyond the expiry of the regulatory period.

The ACCC has consulted extensively on a pricing approach to the declared fixed line services. It has published its preliminary views in its December 2009 Discussion Paper and its September 2010 Draft Report. It has also published its building block model for the fixed line services. The ACCC has received extensive feedback and information in submissions to its previous consultation on the pricing approach. Feedback has been received on the ACCC's proposed pricing methodology for implementing a building block pricing approach, the design of its model, the inputs to the model, and draft indicative prices.

In developing its pricing framework and estimating draft prices for this discussion paper, the ACCC has built on its previous work. It has taken into account all submissions to its previous consultation process.

In these circumstances, the ACCC is minded to move directly to FADs for pricing issues (and any non-contentious non-price issues). After receiving submissions on this discussion paper and the draft FADs, the ACCC plans to publish a Final Report and FADs for the declared fixed line services. The ACCC is taking this approach in recognition that many of the pricing issues are substantially resolved. This approach will expedite the inquiry and provide the industry with certainty.

The ACCC recognises that it has not previously consulted extensively on non-price issues. It recognises that some non-price issues may arise during this consultation process that will require further and more detailed consideration. The ACCC would need to adopt a flexible process to deal with such issues if they arise. One option would be for the ACCC to consider a separate public inquiry to subsequently vary the FADs.²¹ Such an approach would balance the need for certainty in relation to the pricing issues on which the ACCC has already extensively consulted with the opportunity to conduct further consultation on new or contentious issues, if necessary.

The ACCC notes that it has included question boxes in the sections of the discussion paper dealing with non-price issues. This is to assist industry participants in structuring their responses to issues which they may not have considered in detail previously.

The ACCC invites submissions on any matters in this discussion paper and the draft FADs, or on any other issue which may be dealt with in an FAD. The ACCC also invites submissions on the proposed consultation process outlined above.

²⁰ Section 152BCK of the CCA.

²¹ See section 152BCN of the CCA for information of the variation process.

2.1 Consultation process

The ACCC seeks submissions on this discussion paper and the attached FADs by **no later than 5:00 pm on Friday 3 June 2011**.

Any submissions received after this date may not be considered.

The ACCC prefers to receive electronic copies of submissions. Electronic submissions should be in either PDF or Microsoft Word format and allow for searchable text.

Please forward submissions and enquiries by email to the Contact Officers:

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To allow for an informed and consultative process, all submissions will be considered as public submissions and will be posted on the ACCC's website. If interested parties wish to submit commercial-in-confidence material to the ACCC they should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or '[c-i-c]'.

The *ACCC-AER information policy: the collection, use and disclosure of information* sets out the general policy of the ACCC and the Australian Energy Regulator (AER) on the collection, use and disclosure of information. A copy of the guideline can be downloaded from the ACCC website: <http://www.acc.gov.au>.

3 Relevant legislative framework for final access determinations

This section sets out the relevant legislative framework in relation to FADs.

3.1 Content of an FAD

Section 152BC of the CCA specifies what an FAD may contain. It includes, among other things, terms and conditions on which a carrier or carriage service provider (CSP) is to comply with the SAOs and terms and conditions of access to a declared service.

An FAD may make different provisions with respect to different access providers or access seekers.²²

3.2 Fixed principles provisions

An FAD may contain a fixed principles provision, which allows a provision in an FAD to have an expiry date after the expiry date of the FAD.²³ Such a provision would allow the ACCC to ‘lock-in’ a term so that it would be consistent across multiple FADs.

3.3 Varying an FAD

Section 152BCN allows the ACCC to vary or revoke an FAD, provided that certain procedures are followed.

A fixed principles provision cannot be varied or removed unless the FAD sets out the circumstances in which the provision can be varied or removed, and those circumstances are present.²⁴

3.4 Commencement and expiry provisions

Section 152BCF of the CCA sets out the commencement and expiry rules for FADs.

An FAD may be backdated up to 1 January 2011.²⁵

An FAD must have an expiry date, which should align with the expiry of the declaration for that service unless there are circumstances that warrant a different expiry date.²⁶

3.5 Criteria to consider when making an FAD

The ACCC must have regard to the criteria specified in subsection 152BCA(1) of the CCA when making an FAD. These criteria are:

- (a) whether the determination will promote the LTIE of carriage services or services supplied by means of carriage services

²² Subsection 152BC(5) of the CCA.

²³ Section 152BCD of the CCA.

²⁴ Subsection 152BCN(4) of the CCA.

²⁵ Subsections 152BCF(2) and (2A) of the CCA.

²⁶ Subsection 152BCF(6) of the CCA.

- (b) the legitimate business interests of a carrier or CSP who supplies, or is capable of supplying, the declared service, 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 person 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, a telecommunications network or a facility
- (g) the economically efficient operation of a carriage service, a telecommunications network or a facility.

The subsection 152BCA(1) criteria mirror the repealed subsection 152CR(1) criteria that the ACCC was required to take into account in making a final determination (FD) in an access dispute. The ACCC intends to interpret the subsection 152BCA(1) criteria in a similar manner to that used in access disputes.

Subsection 152BCA(2) sets out other matters that the ACCC may take into account in making FADs.

Subsection 152BCA(3) allows the ACCC to take into account any other matters that it thinks are relevant.

The ACCC's initial views on how the legislative criteria in section 152BCA should be interpreted for the FAD process are set out below.

3.5.1 Paragraph 152BCA(1)(a)

The first criterion for the ACCC to consider when making an FAD is 'whether the determination will promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services'.

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.²⁷ This approach to the LTIE was also used by the ACCC in making determinations in access disputes. The ACCC considers that the same interpretation is appropriate for making FADs for the declared fixed line services.

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
- goods and services of a high quality, and/or
- a greater diversity of goods and services.²⁸

The ACCC also notes that the Australian Competition Tribunal (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):

²⁷ ACCC, *Telecommunications services – declaration provisions: a guide to the declaration provisions of Part XIC of the Trade Practices Act, July 1999*, in particular pp. 31-38.

²⁸ *ibid.*, p. 33.

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.²⁹

To consider the likely impact of particular terms and conditions on the LTIE, the CCA 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.³⁰

Promoting competition

In assessing whether particular terms and conditions will promote competition, the ACCC will analyse the relevant markets in which the declared services are supplied (retail and wholesale) and consider whether the terms set in those markets remove obstacles to end-users gaining access to telephony and broadband services.³¹

Obstacles to accessing these services include the price, quality and availability of the services and the ability of competing providers to provide telephony and broadband services.

The ACCC is not required to precisely define the scope of the relevant markets in which the declared services are supplied. The ACCC considers that it is sufficient to broadly identify the scope of the relevant markets likely to be affected by the ACCC’s regulatory decision.

The ACCC’s view is that the relevant markets for the purpose of making FADs for the declared fixed line services are:

- the market for the retail and wholesale supply of voice services (excluding Voice over Internet Protocol (VoIP) and mobile originated calls)

²⁹ *Seven Network Limited (No 4)* [2004] ACompT 11 at [120].

³⁰ Subsection 152AB(2) of the CCA.

³¹ Subsection 152AB(4) of the CCA. This approach is consistent with the approach adopted by the Tribunal in *Telstra Corporations Limited (No 3)* [2007] A CompT 3 at [92]; *Telstra Corporation Limited* [2006] A CompT at [97], [149].

- the market for the retail and wholesale supply of broadband, and
- the market for the retail supply of a bundle of voice and broadband services.

Any-to-any connectivity

The CCA gives guidance on how the objective of any-to-any connectivity is achieved. It is achieved only if each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, with each other end-user who is supplied with the same service or a similar service. This must be the case whether or not the end-users are connected to the same telecommunications network.³²

The ACCC considers that this criterion is relevant to ensuring that the terms and conditions contained in FADs do not create obstacles for the achievement of any-to-any connectivity.

Efficient use of and investment in infrastructure

In determining the extent to which terms and conditions are likely to encourage the economically efficient use of and investment in infrastructure, the ACCC must have regard to:

- whether it is, or is likely to become, technically feasible for the services to be supplied and charged for, having regard to:
 - the technology that is in use, available or likely to become available
 - whether the costs involved in supplying and charging for, the services 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 (for example, the NBN) by which services are, or are likely to become, capable of being supplied, and
- the risks involved in making the investment.³³

The objective of encouraging the ‘economically efficient use of, and economically efficient investment in ... infrastructure’ requires an understanding of the concept of economic efficiency. Economic efficiency 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 provide the greatest benefit relative to costs)

³² Subsection 152AB(8) of the CCA.

³³ Subsections 152AB(6) and (7A) of the CCA.

- dynamic efficiency – this reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

On the issue of efficient investment, the Tribunal has stated that:

...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.³⁴

...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.³⁵

...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.³⁶

3.5.2 Paragraph 152BCA(1)(b)

The second criterion requires the ACCC to consider ‘the legitimate business interests’ of the carrier or CSP when making an FAD.

In the context of access disputes, the ACCC considered that it was in the access provider’s legitimate business interests to earn a normal commercial return on its investment.³⁷ The ACCC is of the view that the concept of ‘legitimate business interests’ in relation to FADs should be interpreted in a similar manner, consistent with the phrase ‘legitimate commercial interests’ used elsewhere in Part XIC of the CCA.

For completeness, the ACCC notes that it would be in the access provider’s legitimate business interests to seek to recover its costs as well as a normal commercial return on investment having regard to the relevant risk involved. However, 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.³⁸

The Tribunal has taken a similar view of the expression ‘legitimate business interests’.³⁹

3.5.3 Paragraph 152BCA(1)(c)

The third criterion requires the ACCC to consider ‘the interests of all persons who have the right to use the service’ when making an FAD.

The ACCC considers that this criterion requires it to have regard to the interests of access seekers. The Tribunal has also taken this approach.⁴⁰ The access seekers’ interests would not be served by higher access prices to declared services, as it would

³⁴ *Telstra Corporation Ltd (No. 3)* [2007] ACompT 3 at [159].

³⁵ *ibid.* at [164].

³⁶ *ibid.*

³⁷ ACCC, *Resolution of telecommunications access disputes – a guide*, March 2004 (revised) (Access Dispute Guidelines), p. 56.

³⁸ ACCC, *Access pricing principles—telecommunications*, July 1997 (1997 Access Pricing Principles), p. 9.

³⁹ *Telstra Corporation Limited* [2006] ACompT 4 at [89].

⁴⁰ *Telstra Corporation Limited* [2006] ACompT 4 at [91].

inhibit their ability to compete with the access provider in the provision of retail services.⁴¹

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 service, to end-users.

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. This could be prevented from occurring if terms and conditions of access favour one or more service providers over others, thereby distorting the competitive process.⁴²

However, the ACCC does not consider that this criterion calls for consideration to be given to the interests of the users of these ‘downstream’ services. The interests of end-users will already be considered under other criteria.

3.5.4 Paragraph 152BCA(1)(d)

The fourth criterion requires that the ACCC consider ‘the direct costs of providing access to the declared service’ when making an FAD.

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.

The ACCC interprets this criterion, and the use of the term ‘direct costs’, as allowing consideration to be given to a contribution to indirect costs. This is consistent with the Tribunal’s approach in an undertaking decision.⁴³ A contribution to indirect costs can also be supported by other criteria.

However, the criterion does not extend to compensation for loss of any ‘monopoly profit’ that occurs as a result of increased competition.⁴⁴

The ACCC also notes that the Tribunal (in another undertaking decision) considered the direct costs criterion ‘is concerned with ensuring that the costs of providing the service are recovered.’⁴⁵ The Tribunal has also noted that the direct costs could conceivably be allocated (and hence recovered) in a number of ways and that adopting any of those approaches would be consistent with this criterion.⁴⁶

3.5.5 Paragraph 152BCA(1)(e)

The fifth criterion requires that the ACCC consider ‘the value to a party of extensions, or enhancements of capability, whose cost is borne by someone else’ when making an FAD.

In the 1997 Access Pricing Principles, the ACCC stated:

⁴¹ *ibid.*

⁴² *ibid.*

⁴³ *Application by Optus Mobile Pty Limited and Optus Networks Pty Limited* [2006] ACompT 8 at [137].

⁴⁴ See Explanatory Memorandum for the *Trade Practices Amendment (Telecommunications) Bill 1996*, p. 44: [T]he ‘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.

⁴⁵ *Telstra Corporation Limited* [2006] ACompT 4 at [92].

⁴⁶ *ibid.* at [139].

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.⁴⁷

The ACCC considers that this application of paragraph 152BCA(1)(e) is relevant to making FADs.

3.5.6 Paragraph 152BCA(1)(f)

The sixth criterion requires the ACCC to consider ‘the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility’ when making an FAD.

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.

The ACCC has previously stated in the context of model non-price terms and conditions, it is of the view that:

...this consideration supports the view that model terms and conditions should reflect the safe and reliable operation of a carriage service, telecommunications network or facility. For instance, the model non-price terms and conditions should not require work practices that would be likely to compromise safety or reliability.⁴⁸

The ACCC considers that these views will apply in relation to the paragraph 152BCA(1)(f) criterion for the making of FADs.

3.5.7 Paragraph 152BCA(1)(g)

The final criterion of subsection 152BCA(1) requires the ACCC to consider ‘the economically efficient operation of a carriage service, a telecommunications network facility or a facility’ when making an FAD.

The ACCC noted in the Access Dispute Guidelines (in the context of arbitrations) that 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 productive, allocative and dynamic efficiency. The Access Dispute Guidelines also 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.⁴⁹

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:

- retail services provided by access seekers using the access provider’s services or by the access provider in competition with those access seekers, and
- the telecommunications networks and infrastructure used to supply these services.⁵⁰

⁴⁷ 1997 Access Pricing Principles, p. 11.

⁴⁸ ACCC, *Final determination – Model Non-price Terms and Conditions*, November 2008, p. 8.

⁴⁹ Access Dispute Guidelines, p. 57.

⁵⁰ *Telstra Corporation Limited* [2006] ACompT at [94]-[95].

3.5.8 Subsection 152BCA(2)

Subsection 152BCA(2) provides that, in making an AD that applies to a carrier or CSP who supplies, or is capable of supplying, the declared services, the ACCC may, if the carrier or provider supplies one or more eligible services,⁵¹ take into account:

- the characteristics of those other eligible services
- the costs associated with those other eligible services
- the revenues associated with those other eligible services, and
- the demand for those other eligible services.

The Explanatory Memorandum states that this provision is intended to ensure that the ACCC, in making an AD, does not consider the declared service in isolation, but also considers other relevant services.⁵² As an example, the Explanatory Memorandum states:

...when specifying the access price for a declared service which is supplied by an access provider over a particular network or facility, the ACCC can take into account not only the access provider's costs and revenues associated with the declared service, but also the costs and revenues associated with other services supplied over that network or facility.⁵³

The ACCC proposes to consider the costs and revenues associated with other services—whether declared or not declared—that are provided over Telstra's network when making FADs for the declared fixed line services.

3.5.9 Subsection 152BCA(3)

This subsection states the ACCC may take into account any other matters that it thinks are relevant when making an FAD.

The ACCC is of the view that considerations of regulatory certainty and consistency will be important when setting the terms and conditions of the FADs.

The ACCC also considers that it should have regard to:

- decisions of the ACCC in previous arbitration determinations made under the repealed Division 8 of the *Trade Practices Act 1974* (TPA) (now renamed the CCA)
- information provided by parties to access disputes under the repealed Division 8 of the TPA
- submissions in response to the ACCC's *Review of 1997 Guide to Telecommunications Access Pricing Principles for Fixed Line Services, Discussion Paper*, December 2009 (December 2009 Discussion Paper)
- the ACCC's *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft Report*, September 2010 (September 2010 Draft Report)
- submissions in response to the September 2010 Draft Report

⁵¹ 'Eligible service' has the same meaning as in section 152AL of the CCA.

⁵² Explanatory Memorandum, Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010, p. 178.

⁵³ *ibid.*

- additional information requested and received from Telstra and other industry participants in order to address some of the issues identified in the submissions in relation to the FLSM
- information that Telstra provides to the ACCC under record keeping rules (RKR), including:
 - the telecommunications regulatory accounting framework RKR (RAF RKR) and
 - the customer access network RKR (CAN RKR) (a summary of which are published at www.accc.gov.au)
- previous pricing principle determinations in relation to the declared fixed line services made by the ACCC under the repealed section 152AQA of the TPA
- previous model term determinations made by the ACCC under the repealed section 152AQB of the TPA
- exemption determinations made under the repealed sections 152AS and 152AT of the TPA.

These considerations and documents do not limit the matters that the ACCC may have regard to when making the FADs for the declared fixed line services.

Part A: Pricing approach

This part (which includes chapters 4-16) outlines the ACCC's proposed pricing approach for making FADs for the declared fixed line services. In addition, it details how the ACCC calculated the price terms for the IADs, which were released in March 2011.

As noted earlier in this discussion paper, the ACCC must have regard to the criteria specified in subsection 152BCA(1) of the CCA when making an FAD. The ACCC has assessed its proposed pricing approach against the criteria in this subsection. The analysis can be found in chapter 16. The ACCC may also consider any other matters that it thinks are relevant, such as regulatory certainty and consistency. The ACCC has considered, and will continue to consider, the relevant statutory criteria when finalising its pricing approach for the FADs.

The price terms included in the IADs were based on prices calculated using the FLSM. The ACCC has also used the FLSM to calculate draft FAD prices for the declared fixed line services. Chapter 4 describes the FLSM and explains how it works. The remaining chapters in Part A provide a detailed explanation of the methodology, assumptions and model inputs used to estimate the IAD prices and draft FAD prices.

The ACCC is seeking submissions from interested parties on the proposed pricing approach for the FADs outlined in this discussion paper. The ACCC will have regard to these submissions in finalising its pricing approach for the FADs.

The ACCC notes that it has consulted extensively on the FLSM and on the forecasts used in estimating prices. Since the release of the September 2010 Draft Report, Telstra has provided its internal forecasts to assist the ACCC in estimating costs and prices. In these circumstances, the ACCC considers that it is probable that further revisions to the draft prices included in this discussion paper are likely to be relatively minor.

The ACCC proposes not to backdate its FAD prices to 1 January 2011. It proposes to apply the draft FAD prices included in this discussion paper from 1 July 2011, which is the commencement date of the proposed five-year regulatory period. The ACCC proposes to include a schedule in the FADs which incorporates the prices in the IADs for the period 1 January 2011 to 30 June 2011. This six month period is a transitional regulatory period.

The ACCC is aware that, in addition to access and connection and disconnection charges, access seekers also incur a range of access-related charges relating to the supply of the declared fixed line services. Currently, 11 access disputes relating to charges for the Internal Interconnect Cable are subject to arbitration. The ACCC considers that information on the full range of access-related charges incurred by access seekers is important for transparency about the total costs involved in obtaining access and for ensuring that costs are only charged for once. The ACCC is in the process of collecting and analysing information on access-related charges. It has not, therefore, dealt with this issue in this Discussion Paper.

4 Moving to a 'building block' pricing approach

Key points

- The ACCC confirms its intention to adopt a BBM pricing methodology to estimate prices for the six declared fixed line services. There has been broad industry support for moving to a BBM approach.
- This approach was adopted in estimating prices for the purposes of making IADs. It has also been used to estimate the draft FAD prices set out in this discussion paper.
- To implement a BBM approach, the ACCC must establish an initial value for the regulatory asset base (RAB).
- The ACCC has developed the FLSM to estimate prices for the declared fixed line services. The FLSM allows Telstra to recover its operating expenses, a commercial return on capital, the return of capital (regulatory depreciation) and tax liabilities.
- The FLSM requires the input of forecasts for operating and capital expenditure, demand and a number of economic variables (including inflation, the parameters used to derive the weighted average cost of capital (WACC) and the corporate tax rate) for the period.
- The ACCC proposes that a formal RKR should be implemented to obtain expenditure and demand forecasts for future regulatory periods.

In its *Draft Report—Review of the 1997 telecommunications access pricing principles for fixed line services* (September 2010 Draft Report), the ACCC proposed to move from its previous pricing methodologies to a new BBM pricing methodology. All industry submissions to the ACCC's September 2010 Draft Report indicated broad acceptance of the ACCC's proposed change in its pricing approach.

In setting IAD prices, the ACCC adopted a BBM approach and this approach has also been adopted in estimating draft FAD prices.

4.1 Background: 1997 Access Pricing Principles

For over a decade the ACCC was guided by its 1997 document *Access Pricing Principles – Telecommunications: a guide* (1997 Access Pricing Principles) when determining pricing principles and indicative prices for the declared fixed line services.

The 1997 Access Pricing Principles proposed a forward looking TSLRIC+ approach to determining prices for access to the relevant declared fixed line services. TSLRIC+ is the incremental or additional costs the firm incurs in providing the service, assuming all of its other production activities remain unchanged. These costs include a mark-up for common costs.

4.1.1 TSLRIC+ pricing for ULLS, LCS and PSTN OTA

In accordance with the 1997 Access Pricing Principles, a forward looking TSLRIC+ pricing approach was consistently adopted as the pricing principle for the ULLS, the

LSS and the PSTN OTA, and indicative prices were calculated for those services based on that pricing principle.

In telecommunications, both in Australia and internationally, the forward looking perspective to measuring TSLRIC+ for fixed line services involved continually revaluing the existing sunk assets used in providing these services. This revaluation was based on the asset's optimised replacement cost, and occurred each time a pricing determination was made.

4.1.2 RMRC based pricing for WLR and LCS

In the past, the ACCC adopted a RMRC pricing approach to calculate indicative prices for the WLR and LCS services. Under an RMRC methodology, the access price is determined by deducting the access provider's avoidable costs of retailing a given service to end-users from the retail price charged for that service.

The ACCC has indicated to industry that the RMRC approach was an interim pricing principle and that it would implement a cost-based pricing approach for WLR and LCS as soon as it had constructed a robust cost model capable of producing reliable price estimates.⁵⁴

4.2 ACCC consultation on moving to a BBM from TSLRIC+ and RMRC

Since the release of the 1997 Access Pricing Principles there has been debate among industry participants regarding the appropriate approach to determining access prices for the declared fixed line services. In particular, the appropriateness of a TSLRIC+ methodology for valuing the fixed line network was questioned because:

- The continual revaluation of network assets introduced uncertainty over the level of access prices.
- Calculating forward looking costs involved estimating the cost of providing the relevant service using modern equivalent assets (MEA). There continues to be considerable debate and uncertainty over what constitutes MEA.

4.2.1 December 2009 Discussion Paper

In December 2009, the ACCC released the *Review of 1997 Guide to Telecommunications Access Pricing Principles for Fixed Line Services: Discussion Paper* (December 2009 Discussion Paper).⁵⁵ The December 2009 Discussion Paper outlined a number of approaches to regulating access prices for the declared fixed line services and signalled that a new approach was timely, given the dynamic nature of the communications market and industry developments since 1997.

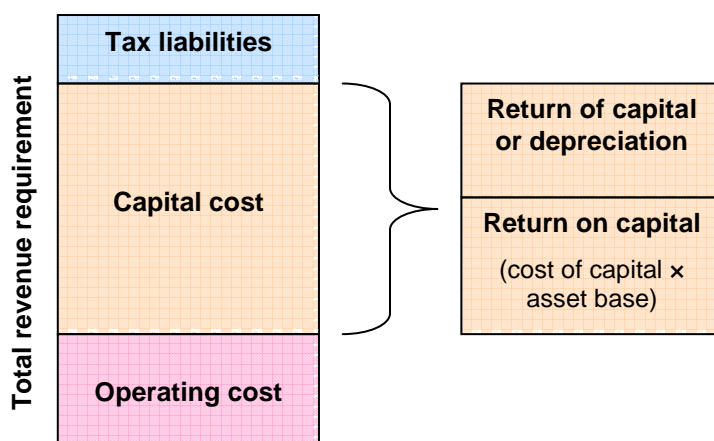
The December 2009 Discussion Paper suggested adopting a BBM approach to calculating prices for all the declared fixed line services. It noted that a BBM would improve certainty for the access provider and access seekers by 'locking in' the initial value of the regulated assets.

⁵⁴ ACCC, *Final determination for model price terms and conditions of the PSTN, ULLS and LCS services*, October 2003; ACCC, *Local services review – Final decision*, July 2006; ACCC, *LCS and WLR – Final pricing principles and indicative prices for 2008-2009*, August 2008; ACCC, *Pricing principles and indicative prices – 1 August 2009 – 31 December 2010*, December 2009.

⁵⁵ The December 2009 Discussion Paper is available on the ACCC website www.accc.gov.au.

To implement a BBM, the ACCC must establish an initial value of the RAB. The initial RAB value is then ‘locked in’ and rolled forward by actual changes in the value of the asset base. The BBM accounts explicitly for each cost category or ‘building block’ faced by the regulated business, including operating expenditure, return of capital, return on capital, and tax liabilities. Each of the building blocks are added together to determine the business’s total revenue requirement. This is illustrated in figure 4.1 below:

Figure 4.1 Building blocks in a BBM



Source: Based on OECD, *Access Pricing in Telecommunications*, 2004, p. 168, amended by the ACCC.

The revenue requirement calculated using the BBM represents the service provider’s efficient costs, including a commercial return on investments that is commensurate with its legitimate commercial interests.

Six submissions were received in response to the December 2009 Discussion Paper.⁵⁶ All of the submissions supported a move to using a BBM with a locked-in RAB to set prices for the fixed line services.

4.2.2 September 2010 Draft Report

Having regard to the submissions made on the December 2009 Discussion Paper, on 17 September 2010 the ACCC released the September 2010 Draft Report, which included draft pricing principles and draft indicative prices.⁵⁷

The September 2010 Draft Report proposed to adopt a BBM with a locked-in RAB calculated using a depreciated actual cost (DAC) valuation methodology. (DAC is also referred to as depreciated historic cost, DHC.) It proposed to use data contained in Telstra’s RAF to estimate the value of the RAB.

Draft indicative prices for all but one of the declared fixed line services—ULLS, WLR, LCS and PSTN OTA—were estimated using a BBM pricing model initially developed by Ovum Pty Ltd and referred to in the September 2010 Draft Report as the Ovum BBM. An indicative price for the LSS was estimated from a separate LSS specific cost model (outside the BBM framework). Certain connection and disconnection charges were also included in the September 2010 Draft Report.

⁵⁶ Submissions are available on the ACCC website www.accc.gov.au.

⁵⁷ The September 2010 Draft Report is available on the ACCC website www.accc.gov.au.

Following the release of the September 2010 Draft Report, the ACCC released its model (then referred to as the Ovum BBM) and an accompanying user manual. Some of the inputs into the model were confidential to Telstra. Telstra entered into confidentiality undertakings with a number of parties during the consultation period in order for those parties to view the confidential inputs.

During the consultation period, the ACCC also released the LSS specific cost model to a number of parties who entered into appropriate confidentiality undertakings with Telstra.

The ACCC received submissions from 15 interested parties on various issues in relation to the September 2010 Draft Report, the model then known as the Ovum BBM, and the LSS specific cost model.⁵⁸

4.2.3 Submissions on moving to a BBM

As noted in section 4.2.1, all submissions to the December 2009 Discussion Paper supported moving to a BBM. Submissions to the September 2010 Draft Report revealed continued broad industry support for moving away from the TSLRIC+ and RMRC pricing approaches to a BBM pricing approach for the declared fixed line services. The ACCC has taken these submissions into account in deciding to adopt a BBM approach for estimating prices for the declared fixed line services.

Telstra submitted that a new pricing framework should avoid further asset revaluations, deliver price stability and provide a smooth transition to the NBN.

While Telstra expressed support for the ACCC's proposed move to a BBM with a locked-in RAB, it argued that the ACCC's proposed implementation of a BBM as set out in the September 2010 Draft Report would have a negative impact on regulatory certainty, create price instability, and would not be consistent with the statutory criteria. Telstra submitted that a new pricing approach should deliver broad price stability. It was highly critical of the proposed reductions in the draft indicative prices for WLR and LCS and the increase in the draft indicative PSTN OTA price, which it stated would remove hundreds of millions of dollars of industry revenue.

Optus, AAPT, Macquarie Telecom, Vodafone Hutchison Australia (VHA) and Herbert Geer (on behalf of iiNet, Internode and Adam Internet) all supported the ACCC's proposed shift from TSLRIC+ and RMRC pricing to a BBM pricing approach for the declared fixed line services. There was general support for a 'locked-in' RAB.

Optus stated that the TSLRIC+ pricing approach has been responsible for a significant overvaluation of the network and resulted in high access prices to the detriment of competition in the industry.

VHA commented that the ACCC's historic approach to determining pricing principles contributed to complexity and uncertainty for both access seekers and access providers.

Frontier Economics (on behalf of the Competitive Carriers' Coalition (CCC)) saw merit in 'locking-in' a RAB for the next set of pricing determinations rather than continuing to revalue the asset base each time the ACCC determines prices.

⁵⁸ Submissions are available on the ACCC website www.accc.gov.au.

4.2.4 ACCC's view on moving to a BBM

The ACCC adopted a BBM pricing approach in estimating prices for the IADs made in March 2011. It proposes to maintain this approach in setting access prices for the fixed line services in FADs.

4.3 ACCC's use of the FLSM to estimate prices

In the September 2010 Draft Report, the ACCC implemented a BBM approach through a new pricing model, then referred to as the Ovum BBM. The ACCC has made substantial revisions to that initial model in response to submissions and further information received since September 2010. The revised model is known as the FLSM.

4.3.1 Design of the FLSM

The FLSM is a Microsoft Excel-based spreadsheet model designed to implement a BBM approach for the declared fixed line services. In developing the initial model, the consultant Ovum Pty Ltd was required to have regard to the AER's post-tax revenue model (PTRM)⁵⁹ and to ensure that the model was tailored to the telecommunications industry.⁶⁰

The model calculates an aggregate revenue requirement for providing services over the PSTN. The original Ovum BBM calculated access prices for the ULLS, WLR, LCS, and PSTN OTA services. Since the release of the September 2010 Draft Report, the ACCC has substantially revised the model and has included the LSS in the FLSM (see chapter 12).

The FLSM contains spreadsheets that calculate each of the cost blocks in the BBM shown in figure 4.1 in this chapter. The amounts calculated for each of these cost blocks are summed to obtain the aggregate revenue requirement for each year of the estimation period. A share of the aggregate revenue requirement is then allocated to each of the declared fixed line services and unit prices are calculated by dividing the revenue requirement for each service by demand for that service. Full details of how the model works are set out in the FLSM user manual.⁶¹

The FLSM undertakes all calculations to determine the revenue requirement and prices in real terms, except for the tax calculations which must be calculated in nominal terms. Estimated real prices are then converted to nominal prices by applying the forecast inflation rate.

In deciding that the FLSM should be a 'real' model, the ACCC weighed up the advantages and disadvantages of real and nominal approaches to estimating prices. The advantages of adopting a real approach to estimating prices include:

- Simplified assessment—using real values facilitates the assessment of trends and identification of cost drivers. Transparency is improved by removing the impact of inflation from the estimates of operating and capital expenditures.

⁵⁹ See AER website at: <http://www.aer.gov.au/content/index.phtml/itemId/709338>.

⁶⁰ Ovum Pty Ltd was engaged by the ACCC on 28 April 2010 to develop a model and user manual. The initial Ovum model and manual were delivered to the ACCC on 6 July 2010. The ACCC has made substantial revisions to the model and manual since then.

⁶¹ The FLSM and accompanying user manual are available on the ACCC's website www.accc.gov.au or by request from the ACCC.

- Avoidance of timing issues—a real approach avoids timing issues associated with applying inflation adjustments to certain items according to when they are incurred during the year.
- Consistency with other regulators—a real approach has been used by a number of state regulators, including the Independent Pricing and Regulatory Tribunal and the Essential Services Commission of Victoria. While the AER’s PTRM adopts a nominal approach, a number of parameters are estimated in real terms (such as the real rate of return) and are then adjusted for forecast inflation.

The ACCC considered that the main disadvantages of a real approach related to clarity and consistency with financial analyses by industry participants and market analysts. A nominal approach may be better understood by industry and market participants. Financial markets typically express rates of return in nominal terms. To address this issue, the FLSM also shows the nominal value for the WACC using the inflation forecasts used in the model.

Similarly, real forecast data such as operating and capital expenditures can be adjusted for inflation to calculate nominal forecast values. To permit these calculations, the FLSM clearly shows the inflation forecasts used to estimate prices so that real parameter values can be converted to nominal values.

The FLSM undertakes all real calculations in the ‘base year’ dollar values, that is, as at 1 July 2009, because 2009-10 is used as the base year.

4.3.2 Submissions on the design of the FLSM

Telstra submitted that the FLSM appeared to be considerably more complex than the PTRM used by the AER. It stated that the differences between the PTRM and the FLSM suggested that the PTRM was not used, in any meaningful sense, as the basis for FLSM.

Telstra also submitted that the ACCC’s treatment of inflation in the FLSM was internally inconsistent ‘in that while it ignores indexation of the initial RAB value, it indexes future amounts of capital rolled into the RAB and ensures that indexed values are used for the purpose of deriving capital forecasts and disconnection/connection charges.’⁶²

Professor Yarrow (in a report submitted by Gilbert and Tobin on behalf of Telstra) asserted that the ACCC’s approach was inconsistent, stating that the initial RAB was set on the basis of unindexed DAC but the BBM would index the historic asset costs (i.e. DAC values) in updating the asset valuation in future years.

Macquarie Telecom, Herbert Geer (on behalf of iiNet, Internode and Adam Internet) and the Royal Bank of Scotland (RBS) considered that the FLSM was not sufficiently transparent in applying the cost allocation factors.

4.3.3 ACCC’s revisions to the design of the FLSM

Taking into account submissions to the September 2010 Draft Report, the ACCC has substantially revised the FLSM since the release of the September 2010 Draft Report. The major revisions are summarised in table 4.1 at the end of this chapter.

⁶² Telstra submission to the ACCC’s *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, October 2010, (Telstra submission) p. 55.

The revisions to the FLSM, and to the inputs to the FLSM, are discussed in detail in chapters 5-13.

Comparison of the FLSM and the PTRM

The main design differences between the FLSM and the AER's PTRM are:

- The FLSM undertakes all calculations (except tax) in real terms (using a base year) and then converts the estimated real prices into nominal prices for each year of the regulatory period. The PTRM undertakes all calculations in nominal terms.
- Because the FLSM is a real model, the method for indexing land values involves inflating real land values by the consumer price index (CPI) to obtain indexed real land values and then inflating them again by the CPI when they are converted into (indexed) nominal values. The PTRM indexes land values that are already expressed in nominal terms.
- There are a large number of joint and common costs incurred in providing a wide range of telecommunications services across a common network. The FLSM allocates these joint and common costs to services using cost allocation factors. Such costs are much less significant in the energy industry because a limited number of standard services are provided via electricity and gas networks. The PTRM uses disaggregated expenditure forecasts provided by the regulated businesses. These forecasts allocate all costs to services.
- The FLSM uses allocation rules to allocate forecast operating and capital expenditures to asset classes. The PTRM uses disaggregated expenditure forecasts provided by the regulated businesses and does not have to apply allocation rules.

While the two models are designed somewhat differently, in order to reflect different industry conditions as set out above, both models are internally consistent. Where practical, the FLSM has adopted the same (or a very similar) approach to that used in the PTRM, for example in the calculation of tax liabilities. In other cases, the ACCC has followed standard practice adopted by other regulators applying a BBM approach, such as in the treatment of land assets (see, for example, the regulatory approach adopted by the Essential Services Commission of Victoria).

The differences between the two models mean that they are not directly comparable and that the prices estimated by the FLSM cannot be replicated by the PTRM.

Real basis for FLSM calculations

The ACCC considers that Telstra's (and their consultant Professor Yarrow's) claim that future RAB values will be indexed reflects a misunderstanding of the way the FLSM works.

As explained in the September 2010 Draft Report, the FLSM undertakes the majority of the calculations to estimate real prices in real terms, with two exceptions: first, the tax calculations must be undertaken in nominal terms and second, land values are indexed so that they appreciate in real terms over time. This means that, for the purposes of the real calculations in the FLSM, all inputs (except for the values used in the tax calculations and land values) are converted to their base year dollar values. Estimated real prices (that is, prices expressed in the base year dollars) are converted into nominal prices after the real price calculations have been completed.

Figure 4.2 shows a simplified illustration of the calculation process applied in the FLSM.⁶³ The diagram shows which calculations are undertaken in real terms and identifies where in the calculation process nominal values are converted into base year dollars and real values are converted into current (that is, nominal) dollars.

In subsequent regulatory periods, the ACCC intends to update the base year. The base year used would be close to the commencement of each regulatory period. Updating the base year will involve converting all real values expressed in the previous base year prices into the new base year prices. The rebasing process would not alter underlying nominal values of any inputs to, or outputs of, the model.

The only exception to this approach, apart from the tax calculation inputs and outputs, relates to the treatment of land asset values (see chapter 5). The ACCC has accepted Telstra's submission that land asset values should be indexed by the CPI. In indexing land values, the CPI is used as a proxy for general increases in land values over time; in addition, land values are not depreciated in the FLSM. The method adopted in the FLSM to index land values is consistent with the approach adopted by other regulators using a real BBM approach (such as the Essential Services Commission of Victoria). No other asset values are indexed in the FLSM.

Connection and disconnection charges are not estimated through the FLSM. The charges previously calculated by reference to a study of the costs incurred in making connections and disconnections have been indexed to maintain the real value of the charges over the regulatory period (see chapter 15).

Transparency of FLSM calculations

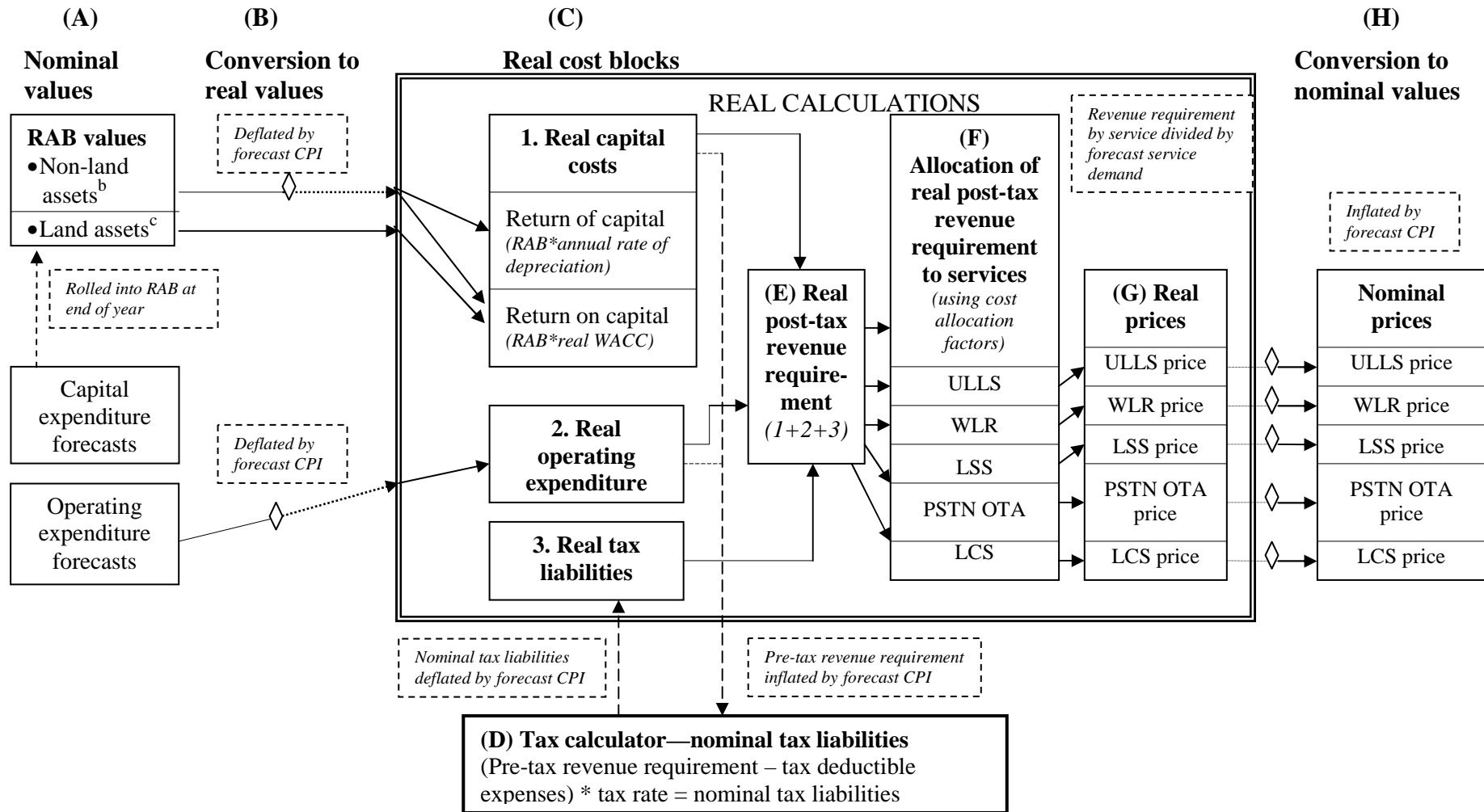
In response to concerns expressed in some submissions about insufficient transparency in some of the calculations undertaken in the FLSM, the ACCC has added three new spreadsheets:

- 'D. Geo cost-based pricing' worksheet—this spreadsheet applies the geographic cost adjustments required to calculate ULLS costs by band⁶⁴ and corresponding costs for WLR in relation to the assets classes 'ducts and pipes' and 'copper cables'
- 'E. Allocation factors calc' worksheet—this spreadsheet shows how the cost allocation factors used in the FLSM are calculated
- 'F. Opex allocations' worksheet—this spreadsheet shows how direct and indirect operating expenditures are allocated to asset classes.

⁶³ The diagram is a highly simplified illustration of the model. Full details of the model calculations are discussed in chapters 5-13 of this discussion paper and in the user manual for the FLSM.

⁶⁴ Bands are geographical classifications of ESAs. Generally, Band 1 includes ESAs in CBD areas; Band 2 includes ESAs in metropolitan areas; Band 3 includes ESAs in regional areas; and Band 4 includes ESAs in rural areas.

Figure 4.2: Simplified illustration of the calculation process in the FLSM—shown for a single year^a



Notes: ^a The diagram shows a simplified flow chart of the model calculations for a single year. It does not illustrate the full RAB roll-forward process; the roll forward of depreciation and any asset disposals is not illustrated (see chapter 6). ^b Non-land assets are valued at historic cost, except for ‘ducts and pipes’ which have been increased above the historic cost recorded in the RAF accounts (see chapter 5). ^c Land values have been indexed by the CPI since their last revaluation by Telstra. Land is not depreciated (see chapter 5).

4.3.4 External checking of FLSM by Marsden Jacob Associates

As noted above, the ACCC has substantially revised the FLSM since the release of the September 2010 Draft Report. The ACCC decided in February 2011 to engage a consultancy firm with economic modelling expertise to check the revised FLSM prior to the release of this discussion paper.

On 9 March 2011, the ACCC engaged Marsden Jacob Associates Pty Ltd (MJA) to undertake the following tasks:

- check the FLSM to ensure that all formulas are working as intended
- remove any redundant code that had no impact on the function of the model, and
- ensure a consistent approach in the presentation of the FLSM inputs and outputs.

MJA was also required to update the associated user manual to reflect any changes to the model. This was to ensure that the manual provided the correct instructions to users on inputting the variables required to run the model.

MJA delivered the checked model and updated user manual to the ACCC on 23 March 2011. MJA confirmed that the FLSM is working as intended. Revisions were made by MJA to improve the presentation and usability of the FLSM.

4.4 Proposed BBM record keeping rule

Using a BBM to estimate prices over a regulatory period requires the input of forecasts for operating and capital expenditure, demand and a number of economic variables (including inflation, the parameters used to derive the WACC and the corporate tax rate) for the period.

In other industries, such as the electricity and gas industries, the regulated businesses submit forecasts of operating and capital expenditure, demand and other variables to the regulator.

4.4.1 September 2010 Draft Report proposal for a BBM record keeping rule

The ACCC indicated in the September 2010 Draft Report that it intended to make a RKR to obtain operating and capital expenditure and demand forecasts from Telstra for future regulatory periods. The ACCC noted that the BBM RKR would require Telstra to explain the underlying methodology and assumptions used to derive its forecasts.

The ACCC stated its intention to consult industry on the proposed RKR and prepare a regulatory impact statement. The consultation process would be conducted separately to the access pricing principles review in order to reduce the regulatory burden imposed on industry participants.

4.4.2 Submissions on the proposed BBM RKR

Telstra submitted that a new RKR covering forecast information was unnecessary. It considered that an informal and voluntary process would be sufficient to obtain the forecast information required for the purposes of the BBM. Telstra proposed that it work with the ACCC to identify the required information and forecast period, noting that its internal forecasts for management purposes cover a considerably shorter time

period than the four year regulatory period proposed by the ACCC in the September 2010 Draft Report.

Optus and Macquarie Telecom supported the ACCC proposal to make a RKR to obtain operating and capital expenditure forecasts from Telstra.

AAPT expressed concern that a BBM RKR would be open to gaming since Telstra would have incentives to over estimate its expenditure forecasts.

4.4.3 ACCC's view on the proposed BBM RKR for future periods

The ACCC acknowledges that Telstra cooperated with the ACCC by providing expenditure and demand forecasts for part of the proposed regulatory period following an information request by the ACCC in November 2010.⁶⁵ However, forecasts were not provided for the entire proposed regulatory period. Further, the explanatory material provided with the forecasts was insufficient to enable a full assessment by the ACCC of the basis for the forecasts.

Consequently, the ACCC maintains its view that a formal RKR should be implemented to obtain expenditure and demand forecasts for future regulatory periods. A BBM RKR will clearly specify the information required, the nature of the supporting information required, the format for presenting the information, and timeframes for providing it.

The ACCC considers that setting out these requirements in the proposed BBM RKR will increase regulatory certainty by ensuring that Telstra is aware of its information obligations and has sufficient notice of when its forecasts will be required.

A formal RKR will provide transparency for all industry participants. The ACCC considers that transparency in implementing the BBM is crucial to ensuring all industry participants have a high degree of confidence in the ACCC's new pricing approach.

The ACCC will consult broadly on the proposed BBM RKR in due course after the FADs are issued for the fixed line services. The ACCC considers that conducting the consultation concurrently with the FAD inquiry would place too high a regulatory burden on industry participants. Also, changes may be made to the information required under the BBM RKR following the current FAD consultation period.

4.5 Length of regulatory period

As noted in section 3.4, an FAD must have an expiry date, which should align with the expiry of the declaration for that service unless there are circumstances that warrant a different expiry date. The declarations for the six declared fixed line services all expire on 31 July 2014.

4.5.1 Regulatory period proposed in September 2010 Draft Report

In the September 2010 Draft Report, the ACCC proposed an initial regulatory period of four years. The ACCC considered this period would be long enough to provide sufficient stability and certainty to support industry investment planning, but short

⁶⁵ Telstra Corporation Limited, *Pricing Principles for Fixed Line Services – Response to the ACCC's request for further information*, November 2010 on the ACCC website at www.accc.gov.au.

enough to ensure that prices and pricing structures would be reviewed as industry circumstances changed.

The ACCC noted that there were trade-offs involved in setting shorter or longer periods. In particular, with a shorter regulatory period:

- there is greater certainty around expenditure and demand forecasts
- there is a greater regulatory and administrative burden in undertaking more frequent price reviews.

In contrast, with a longer regulatory period:

- Telstra and the access seekers will have greater price certainty
- there are stronger incentives to minimise costs and increase productivity
- there is an increased potential that costs will not be recovered (which would be detrimental to dynamic efficiency).

4.5.2 Submissions on length of the regulatory period

Submissions to the September 2010 Draft Report expressed a range of views on the appropriate length of the regulatory period.

Telstra advocated a two year regulatory period on the grounds that a longer period would be subject to substantial forecasting error, which would result in uncertainty, unpredictability and potential dispute. It stated that a shorter regulatory period would reflect the dynamic nature of the telecommunications market and the current uncertainty around the roll-out of the NBN.

Frontier Economics also suggested an initial regulatory period of two years. It considered that a longer regulatory period of four or five-years would be appropriate when industry conditions were more certain and more accurate forecasts could be made.

Optus expressed concern that a long regulatory period would create the potential for access seekers to pay prices significantly above underlying costs. It submitted that the regulatory period should be no longer than three years.

In contrast, Macquarie Telecom, AAPT and M2 Telecommunications supported a four year regulatory period.

Macquarie Telecom stated that the initial regulatory period must provide sufficient price certainty to support access seekers' investment incentives and minimise the administrative burden of price reviews. However, it noted that its support for a four year regulatory period was subject to the proviso that it can be satisfied that the ACCC's forecasts are reasonable.

4.5.3 ACCC's views on the proposed regulatory period

The ACCC proposes a five-year regulatory period. The regulatory period will start on 1 July 2011 and extend to 30 June 2016.

Subsection 152BCF(6) sets out the matters that the ACCC must have regard to when setting an expiry date for an access determination:

- the principle that the expiry date of an access determination should be the same as the expiry date of the declaration, unless there are circumstances that warrant a different expiry date; and
- such other matters as the ACCC considers relevant.

In setting the expiry date for the FADs, the ACCC has had regard to the principle that the expiry dates for the access determination and the declarations for the declared fixed line services should be the same. However, the ACCC believes that in this case, there are a number of circumstances that warrant a different expiry date. In particular, the ACCC has decided that a five-year regulatory period is appropriate. A later expiry date than that of the declarations for the fixed line services is required for the access determinations if a five-year regulatory period is to be applied.

The primary reason for choosing a five-year regulatory period (and hence extending the expiry date beyond the declarations) is to provide certainty during the transition to the NBN. The five-year regulatory period will provide all industry participants with certainty regarding fixed line prices during the initial transition to the NBN. This price certainty will help access seekers in their planning of their own transitions to the NBN.

Both Telstra and Frontier Economics were concerned in the earlier consultation that a lengthy regulatory period was not appropriate because forecasts were not available for that period. Subsequently, Telstra has agreed to provide the ACCC with five-year operating expenditure forecasts and projections for its capital expenditure.

The ACCC notes that a five-year regulatory period is used by a number of other regulators, including Ofwat (for water price control in the United Kingdom) and the AER (in the national electricity market).⁶⁶

The ACCC has also considered the need to reduce the regulatory burden on industry by limiting the frequency of consultations and inquiries. Extending the regulatory period to five years will reduce the regulatory burden on industry.

4.5.4 Proposed transition from the IAD prices to FAD prices

The IADs commenced on 1 January 2011. As noted in section 1.1, once an FAD is made for a declared service, an IAD relating to that service is automatically revoked.

The ACCC proposes not to backdate its FAD prices to 1 January 2011. It proposes to apply the draft FAD prices included in this discussion paper from 1 July 2011, which is the commencement date of the proposed five-year regulatory period. The ACCC proposes to include a schedule in the FADs which incorporates the prices in the IADs for the period 1 January 2011 to 30 June 2011. This six month period is a transitional regulatory period.

The ACCC considers that this proposed action will promote a smooth transition from the IAD prices to the FAD prices. It will also promote price certainty for that period of time and avoid the transaction costs to Telstra and access seekers of accounting for revised prices in their billing systems.

The ACCC notes that the IAD prices were estimated using the best information available at the time the IADs were made. The new information that has become

⁶⁶ Ofwat, *Price review 2009*, viewed 7 April 2011, <http://www.ofwat.gov.uk/pricereview/>; National Electricity Rules, Chapter 6, clause 6.3.2.

available since then has not resulted in a significant change in estimated prices. The ACCC notes that the draft FAD prices do not differ significantly from the IAD prices.

In the circumstances, the ACCC considers that the benefits to market participants from revising the IAD prices during the first half of 2011 are not sufficient to justify revising these prices, given the potential costs that market participants would likely incur in implementing revised prices for this time period.

The ACCC notes that an additional benefit of implementing the proposed FAD prices from 1 July 2011 is that it will bring the price determinations onto a financial year basis. This is consistent with the financial year basis of the FLSM's calculations. Further, business planning and financial reporting are typically done on a financial year basis.

Table 4.1 Revisions to the FLSM and ACCC forecasts since the September 2010 Draft Report

Revision	Submission reference*	Comment
<i>Assets included in FLSM</i>		
Inclusion of some assets incorrectly omitted from the FLSM and removal of some assets incorrectly included	Telstra main submission (pp. 108-109)	<p>Asset classes added to the RAB, based on information provided by Telstra, are:</p> <ul style="list-style-type: none"> • ‘other communications plant and equipment’ added to CAN – to account for CAN radio systems and some network support assets • ‘network land’ and ‘other non current assets’ – include relevant land assets • ‘network buildings and support assets’ – include relevant building and support assets <p>Asset classes removed from RAB, based on information provided by Telstra, are ‘satellite equipment’ and ‘international network cables’.</p>
Treatment of land assets	Telstra main submission (pp. 59-60)	<p>To reflect the appreciation of land, the value of land assets is indexed by increasing the closing value of land assets by forecast CPI inflation to obtain the following year’s opening value when rolling over the RAB.</p> <p>To prevent land assets being depreciated in the FLSM, very long asset lives (10,000 years) have been used to ensure that annual depreciation is negligible. This is consistent with the approach adopted by many other regulators.</p>
Revision of asset lives for some asset classes	Telstra main submission (pp. 108-109) and Schedule 7	<p>The following asset lives have been increased on the basis of information provided by Telstra:</p> <ul style="list-style-type: none"> • ‘ducts and pipes’ (from 30 to 35 years) • ‘transmission equipment’ (from 10 to 15 years) • ‘radio bearer equipment’ (from 10 to 16 years). <p>Asset lives for newly added asset classes were obtained from Telstra’s Schedule 7.</p>
<i>Inclusion of LSS in FLSM</i>		
Inclusion of LSS in FLSM	Frontier Economics (pp. 25-33), Herbert Geer (pp. 3-7), Optus (p. 37) and	Estimates of the specific costs of providing the LSS, including an allowance for overheads, were included in the FLSM following Telstra’s provision of information on the costs it allocates to the LSS, in response to a request by the

Revision	Submission reference*	Comment
	Telstra main submission (p. 121)	ACCC. Network costs allocated to the LSS by Telstra were excluded as these are recovered through the WLR prices.
<i>Cost allocation factors</i>		
Increased transparency in cost allocation factors	Macquarie Telecom (p. 3), RBS (p. 4), Herbert Geer (p. 12)	New spreadsheet showing the calculations for cost allocation factors added to the FLSM.
Use of 2008-09 Analysys allocation factors as starting point		Correction of error caused by using 2009-10 Analysys allocation factors instead of 2008-09 Analysys allocation factors.
PSTN OTA transmission allocation factors	Frontier Economics (pp. 19-20)	Calculation error corrected. Use of historical growth in PSTN minutes, packet switch data and ISDN traffic to determine cost allocation factors. Also corrected error in units of data which were incorrectly in Terabits when they should have been in Terabytes.
Allocation factors included for added asset classes 'network land' and 'network building and support assets'		For the ULLS and the WLR, the factors are Analysys Cost Model factors adjusted for actual 2008-09 demand and for demand forecasts in subsequent years. For PSTN OTA and LCS, the factors are a weighted average of the cost allocation factors for all other asset classes (excluding 'network land' and 'network building and support assets') used by those services.
Allocation factors for 'other plant and equipment' and 'indirect capital assets'		'Indirect capital assets': The factors are calculated by taking a weighted average of the allocation factors for the other asset classes. 'Other communications plant and equipment': For ULLS and WLR, a weighted average of the CAN 'radio bearer equipment' and 'network building and support assets' factors are used. For PSTN OTA and LCS, the 'network building and support assets' allocations are used.
Adjustment of cost allocation factors for 'ducts and pipes' and 'copper cables' for ULLS and WLR to take account of geographic cost differentials	Optus (pp. 30-35, 53-56), CEG (on behalf of Optus)	Cost relativities between the bands for 'ducts and pipes' and 'copper cables' have been derived from the Analysys Cost Model.
<i>Operating expenditure</i>		
Revisions to total operating expenditure		Revisions reflect the changes in asset classes included in the RAB.

Revision	Submission reference*	Comment
Removal of operating expenditure for 'customer equipment', 'satellite equipment' and 'international network cables' asset classes		Telstra has advised that these asset classes are not used to provide the regulated fixed line services.
Mark-up for indirect operating costs increased	Telstra main submission (p. 61)	Increased from 10 per cent to 80 per cent based on analysis of Telstra's RAF accounts and Analysys Cost Model assumptions.
Use of better inflator for telecommunications assets	Frontier Economics (p. 11)	ABS producer price index (PPI) - Communication equipment manufacturing.
Operating expenditure for 'other communications plant and equipment' reduced		Updated to reflect better information from Telstra on the proportion of 'other communications plant and equipment' assets used to provide the fixed line services.
Lower forecasts for CAN operating expenditure	Frontier Economics (pp. 10-12), Optus main submission (pp. 8-19)	Use of the most recent actual operating expenditure value instead of the 5-year average.
<i>Capital expenditure</i>		
Use of better inflator for telecommunications assets	Frontier Economics (p. 6)	ABS PPI - Communication equipment manufacturing.
Inclusion of forecast capital expenditure for 'network land' and 'network building and support assets'		Forecasts determined using a five year (FY2005-2009) historical average of expenditures indexed to 1 June 2009. Historical capital expenditures obtained from Telstra's asset register.
Inclusion of capital expenditure for 'indirect capital assets'		Annual capital expenditure has been assumed to equal annual depreciation.
Corrected capital expenditure for 'Indirect Capital Assets' asset class		Capital expenditure for 'Indirect Capital Assets' now correctly calculated using (undepreciated value ÷ average asset life), rather than (average asset life ÷ depreciated value).
Smoothed regulatory depreciation schedule for 'Pair gain systems', 'Switching Equipment – Local' and 'Indirect Capital Assets' asset classes.		Regulatory depreciation has been smoothed for asset classes with a remaining asset life shorter than the regulatory period. Without smoothing there would be a depressed depreciation profile because the opening RAB does not represent a realistic investment profile prior to the commencement of the model.

Revision	Submission reference*	Comment
Lower forecasts for CAN capital expenditure	Frontier Economics (pp. 6-10), Optus main submission (pp. 8-19)	Extrapolation of the declining trend in capital expenditure over the past 5 years. Forecasts were revised again after Telstra provided new actual and forecast data on 3 March 2011, and forecasts were extrapolated based on Telstra's recommended methodology.
<i>WACC parameters</i>		
Updated risk free rate	Telstra main submission (p. 84)	Increased to 5.61 per cent (from 5.36 per cent), based on 20 day average for 6 December 2010 to 31 December 2010.
Updated expected inflation		Based on updated inflation forecasts issued by the Reserve Bank. The updated expected inflation rate is 2.63 per cent; compared to 2.59 per cent in the September 2010 Draft Report.
Revised gamma	Telstra main submission (pp. 87-90)	Economy-wide gamma estimate of 0.45 adopted.
Use of debt risk premium for benchmark A-rated 10-year bonds	Vodafone Hutchison (p. 8), Telstra main submission (p. 84)	The nominal debt risk premium has been updated to 2.19 per cent, based on 20 day average for 6 December 2010 to 31 December 2010 using Telstra's Australian bond issues with 10 years to maturity. Telstra is understood to currently be the only A-rated company issuing 10-year bonds. As a result, the Telstra 10-year bond issues were used as the benchmark at this time.
<i>Regulatory period</i>		
IADs have been set for one calendar year (2011)	Telstra main submission (p. 110), Optus main submission (pp. 18-19)	IADs are interim and apply until FADs are made.
Regulatory period will apply for five financial years		The regulatory period will apply from 2011-12 to 2015-16 in order to reduce the regulatory burden on industry (the regulatory period previously applied until 2013-14).

Revision	Submission reference*	Comment
<i>Forecast demand</i>		
Use of actual 2009-10 demand figures for PSTN OTA and LCS	Telstra supplementary submission, November 2010 (p. 32)	For PSTN OTA, actual 2009-10 data now available from Telstra's Schedule 8 RAF data. For LCS, demand data provided by Telstra (9 months of actual and 3 months of forecasts).
Updated demand forecasts	Optus main submission (p. 39-42), Macquarie Telecom (p. 7) Frontier Economics (p. 13-15), Herbert Geer (p. 13), Telstra supplementary submission, November 2010 (p. 32)	Revisions based on actual demand trends and internal projections provided by Telstra in November 2010. Service demand figures are kept constant for 2014-15 and 2015-16.
<i>Roll-forward</i>		
2009-10 RAB roll-forward calculation	Telstra main submission (pp. 63-64)	Correction of calculation for net capital additions in 2009-10.
<i>RAB</i>		
Revision of RAB values included in FLSM		Asset values reconciled with Telstra's asset register and Telstra's November submission providing disaggregated values for assets included in the RAF.
Allocation of 'network building and support assets' to CAN and Core RABs	Telstra supplementary submission, November 2010 (pp. 8-14)	Allocation between the CAN and Core based on depreciated TEA model values for 'network building and support assets' included in the CAN. The residual value is allocated to the Core.
Value for 'other CAN' asset class		'Other CAN' is made up of pair gains systems equipment. The depreciation level for the 'pair gains' asset class has been applied to 'other CAN'.
Revision of initial RAB value for 'Ducts and pipes' asset class.		'Ducts and pipes' initial RAB value increased to reflect the fact that the economic value of these assets is likely to exceed the depreciated historic value of these assets.

Revision	Submission reference*	Comment
Allocation of 'other communications plant and equipment' to CAN and Core RABs		'Other communications plant and equipment' is made up of CAN Radio bearer equipment and network buildings/support assets. The CAN Radio bearer equipment in this asset class is allocated entirely to the CAN. The remaining 'other communications plant and equipment' assets (network buildings/support-type assets) are allocated in the same proportion as the 'network building and support' asset class is allocated between the CAN and Core.
Allocation of 'indirect capital assets' to CAN and Core RABs		'Indirect capital assets' have been allocated to the CAN and Core RABs in the same proportions as direct network assets (59% for the CAN, 41% Core).
Pricing		
Averaging of ULLS band prices		ULLS band 1 to 3 prices have been averaged by using the proportion of SIOs in each of the three bands to obtain a weighted average price.

*Where relevant, the submissions taken into account by the ACCC in deciding on revisions are listed. In some cases, the ACCC has made revisions based on its own analysis since releasing the September 2010 Draft Report.

5 Setting the value of the initial regulatory asset base

Key points

- The ACCC considers that a suitable range of RAB values is set by the depreciated historic value of Telstra's investments in network assets (that is, depreciated actual cost) and by depreciated optimised replacement cost.
- In estimating access prices for the FADs, the ACCC proposes to adopt the same approach to determining the initial RAB value as adopted for the IADs. For the IADs, the initial opening RAB value was set at \$17.75 billion as at 1 July 2009. That value has been rolled forward to calculate the opening RAB value as at 1 July 2011—that value is \$15.9 billion.
- The ACCC has accepted Telstra's advice on the network assets used to supply the declared fixed line services and revised the asset classes included in the RAB.
- The ACCC has adopted land asset values that have been indexed by the CPI since Telstra's last revaluation of these assets. No depreciation has been allowed for land assets in the FLSM.
- While precise information is not available, the ACCC considers that Telstra is unlikely, on average, to have under-recovered depreciation on its network assets under the previous TSLRIC+ approach.
- The ACCC has revised the asset lives for some asset classes based on the additional, more detailed information provided by Telstra. The ACCC did not adopt Telstra's proposal to truncate the lives of assets that will no longer be used after the NBN is rolled out.

The RAB is the dollar value attributed to the network assets used by the access provider in providing the regulated services.

Implementing a building block approach requires the ACCC to establish the initial value of the access provider's RAB. Once the initial RAB has been determined, the value is 'locked-in' and rolled forward annually according to a defined roll-forward mechanism (see chapter 6). The initial RAB value is a major input in determining the level of access prices calculated using a building block approach.

5.1 *The initial RAB*

The main issue in setting the initial RAB value is how to assign a value to the access provider's sunk network assets. There is no uniquely 'correct' value for the initial RAB. An element of judgement is therefore required to determine a suitable range of potential RAB values for Telstra's sunk investments in network assets and then to settle on a value within this range that forms a sound basis for estimating prices.

Key considerations in setting an initial RAB value include:

- the legitimate commercial interests of the access provider and access seekers
- the level of past recovery on the assets received by the access provider

- the incentives for efficient future investments in network assets
- industry confidence in making future investment decisions, and
- the reliability of the valuation methodology.

September 2010 Draft Report RAB value

In the September 2010 Draft Report, the ACCC noted that potential values for the initial RAB ranged from scrap value to optimised replacement cost (ORC). While scrap value could be justified by reference to the sunk nature of the copper network, setting the initial RAB on this basis would be inconsistent with the access provider's legitimate commercial interests. Not allowing an access provider to recover these costs could mean that it—or other participants in the telecommunications industry or in other regulated industries—may be unwilling to make sunk investments in the future.

The ACCC proposed to adopt an initial RAB value of \$13.3 billion, comprising \$7.5 billion for CAN assets and \$5.8 billion for Core assets, based on a DAC valuation methodology. The reason for using this valuation method is discussed in section 5.3 below.

The ACCC used historic costs in the RAF accounts as the basis for setting the draft initial RAB value. The value was also based on the CAN and Core assets identified by the ACCC as being used to provide the fixed line services (discussed in section 5.2 below).

In the September 2010 Draft Report, the ACCC recognised the limitations of Telstra's RAF data, particularly for assets that were put in place many years ago when account keeping was generally less robust and Telstra was subject to less stringent accounting obligations and disclosure rules. The ACCC has in the past expressed concerns about the incomplete nature of Telstra's records on its long-lived network assets, particularly its ducts, pipes and copper cables. The ACCC acknowledged that the book value of assets contained in the RAF is only an approximation of the actual costs incurred by Telstra. However, the ACCC came to a preliminary view that Telstra's RAF data represented the most complete and accurate account of the historic cost of the fixed line network.

Submissions on the initial RAB value

Telstra submitted that the proposed RAB value of \$13.3 billion would prevent Telstra from recovering its costs. It proposed an initial RAB value of \$28-32 billion, which it considered would be consistent with past ACCC pricing decisions using the previous TSLRIC+ approach. In support of this view, it submitted that:

An important way in which the ACCC can promote stability and predictability is for it to adopt an initial depreciated RAB value for Telstra's assets which reflects the current depreciated value of those same assets under the current TSLRIC+ regime.⁶⁷

A report by Professor Yarrow (submitted by Gilbert and Tobin on behalf of Telstra) noted that 'there is likely no one correct way' of determining an initial RAB value.⁶⁸ He was unable to comment on the appropriateness of the proposed RAB value,

⁶⁷ Telstra submission, October 2010, p. 67.

⁶⁸ Gilbert and Tobin submission of Professor George Yarrow's expert report to the ACCC's *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, October 2010, (Yarrow submission), p. 9.

stating: ‘that is a judgment for those with greater knowledge of the full facts of the Australian context’.⁶⁹ However, he submitted that the initial RAB value should be assessed on the basis of ‘the reasonableness of the outcomes achieved’,⁷⁰ which he interpreted as price stability. He considered that any unexpected price changes would reflect regulatory opportunism which would damage regulatory certainty and predictability.

Optus submitted that the values adopted by the ACCC in the September 2010 Draft Report were conservative in Telstra’s favour. Optus considered that Telstra’s RAF values should be reduced by Telstra’s actual cost recovery over time, which it considered would result in a range for the initial RAB value for Telstra’s CAN assets of between \$2 billion and \$6 billion.

Herbert Geer submitted that the ACCC could not reasonably justify its valuation of Telstra’s CAN and Core assets. It argued that the ACCC did not specify in detail how these figures had been determined. It submitted that the ACCC should disclose the RAF data that it relied on so that its suitability for setting the initial RAB could be reviewed by parties other than Telstra.

The RBS submitted that the ACCC’s proposed initial RAB value was inappropriate because it was based on a DAC valuation.

ACCC proposed view on the initial RAB value

The ACCC considers that a suitable range of RAB values is set by the depreciated historic value of Telstra’s investments in network assets (that is, their DAC value) and by depreciated optimised replacement cost (DORC).

Given the inherent limitations of DAC, DORC and current cost accounting approaches in determining a RAB value (discussed in section 5.3 below), the ACCC has considered a number of other factors to assist it in proposing an initial RAB value within the suitable range of potential values.

In developing its proposed initial RAB value, the ACCC has used the DAC value that forms the lower bound of the suitable range as a starting point. The more substantial limitations associated with obtaining a DORC value ruled it out as a starting point. The ACCC made two adjustments to the DAC value. In making these adjustments, the ACCC took into account submissions to the September 2010 Draft Report, the initial RAB value of \$17.75 billion adopted for the purposes of estimating IAD prices, and two additional considerations set out below.

The proposed opening RAB value as at 1 July 2011 is \$15.9 billion. This value has been calculated by rolling forward the initial opening RAB value of \$17.75 billion estimated by the ACCC to represent an appropriate value for Telstra’s network assets as at 1 July 2009. (The proposed roll-forward mechanism, which was used to roll forward the initial opening RAB value, is described in chapter 6.) Both of these opening RAB values fall within the range identified by the ACCC as suitable for the purposes of setting regulated access prices for the declared fixed line services, that is, the DAC and DORC values.

In calculating the initial opening RAB value of \$17.75 billion, the first adjustment to the starting point DAC value is that the ACCC has accepted that the value of land

⁶⁹ *ibid.*

⁷⁰ *ibid.*, p. 3.

assets should be indexed to reflect the appreciation of land values over time (see section 5.4 below). The ACCC proposes to adopt the land values provided by Telstra which Telstra has indexed by the CPI since its last revaluation of land assets in 1991-92.⁷¹ No depreciation has been allowed for land assets in the FLSM. A DAC value with indexed land asset values results in a RAB estimate of \$16.31 billion.

The second adjustment applied in calculating the initial opening RAB value is that the ACCC increased the value assigned to the 'ducts and pipes' asset class by \$1.44 billion above its value in Telstra's RAF accounts. In making this adjustment, the ACCC was guided by the principle that pricing stability is desirable to the extent that it supports past investments and promotes industry confidence in making future investment decisions.

In its previous regulatory decisions, the ACCC has consistently sought to promote competition by encouraging access seeker infrastructure investments. As a result, there has been significant growth in digital subscriber line access multiplexer (DSLAM) investments as access seekers have increasingly competed on price and service offerings.

Infrastructure competition has, to date, occurred predominantly in Band 2 ESAs, with access seeker DSLAMs overwhelmingly located in Band 2 ESAs. As at December 2010, approximately 76 per cent of all Band 2 ESAs were served by one or more competitor DSLAMs (that is, DSLAMs other than Telstra's), and 94 percent of total ULLS services in operation (SIOs) are provided in Band 2 ESAs.⁷²

The ACCC considers that, in determining an initial RAB value for the CAN and Core assets, it is important to protect the legitimate business interests of both access seekers and Telstra. This consideration has led the ACCC to conclude that a clear justification is required for any significant change in existing prices. Based on this view, the ACCC has decided to maintain the \$16 ULLS price in Band 2 included in the IADs. In addition, for the reasons set out in chapter 11, the ACCC decided that a single ULLS price of \$16 should apply in Bands 1 to 3.

To determine a RAB value consistent with an averaged ULLS Band 1 to 3 price of \$16,⁷³ the ACCC calculated the net present value of the cash flows expected from the ULLS Band 1 to 3 price and the prices for the other fixed line services estimated by the FLSM as being consistent with the \$16 ULLS Band 1 to 3 price.⁷⁴ The relativities between these prices and the ULLS Band 1 to 3 price are determined within the FLSM based on the relative costs of providing those services (see chapters 10 and 11).

The net present value calculation implies an initial opening RAB value of \$17.75 billion as at 1 July 2009, when the increment above the RAB estimate of \$16.31 billion (based on a DAC value with indexed land asset values) is allocated to the 'ducts and pipes' asset class. Since this value falls within the suitable range of potential RAB values (set by DAC and DORC), the ACCC has determined that this

⁷¹ Telstra submission, October 2010, p. 78.

⁷² Telstra CAN RKR data, December 2010.

⁷³ The averaged ULLS Band 1 to 3 price was calculated using the relative shares of SIOs in each band to weight the individual Band 1 to 3 ULLS prices estimated by the FLSM.

⁷⁴ Using a net present value approach to determine asset values is an accepted valuation method. See Steering Committee on National Performance Monitoring of Government Trading Enterprises, *Guidelines on Accounting Policy for Valuation of Assets of Government Trading Enterprises: Using Current Valuation Methods*, Commonwealth of Australia, State and Territory Governments, 1994.

value represented an appropriate value for Telstra's CAN and Core assets used to provide the fixed line services.

In deciding to allocate the increment to the 'ducts and pipes' asset class, the ACCC took the view that the economic value of these assets is likely to be substantially higher than their depreciated historic values as recorded in the RAF accounts. Since these assets are long-lived, they are more susceptible to the limitations of past accounting practices than other network assets in establishing a value based on accounting records. In addition, these assets represent infrastructure that will be of use beyond the life of the current copper network. In particular, ducts and pipes are likely to be of continuing economic value for a fibre based network.

Table 5.1 shows a reconciliation of the initial RAB values included in the September 2010 Draft Report and the proposed initial opening RAB value of \$17.75 billion as at 1 July 2009.

Table 5.1: Initial RAB value—Reconciliation of September 2010 Draft Report RAB value and proposed initial opening RAB value as at 1 July 2009

	September 2010 Draft Report	Proposed RAB value
CAN	\$7.5b	\$9.8b
Core	\$5.8b	\$8.0b
Total	\$13.3b	\$17.8b

Asset	Reason	CAN (\$m)	Core (\$m)
Network land	Included on Telstra advice; included at indexed historic cost	■	■
Network buildings and support	Included on Telstra advice	■	■
Indirect capital assets	Included on Telstra advice	■	■
Satellite equipment and international network cables	Removed on Telstra advice	0	-720
Pair gains systems	Telstra data, lower value attributed to fixed line services	-460	0
Ducts and pipes	Increased value	1440	0
Switching equipment	Telstra data, lower value attributed to fixed line services	0	-50
Transmission equipment	Telstra data, lower value attributed to fixed line services	0	-110
Inter-exchange cables	Telstra data, lower value attributed to fixed line services	0	-70
Total		2300	2170

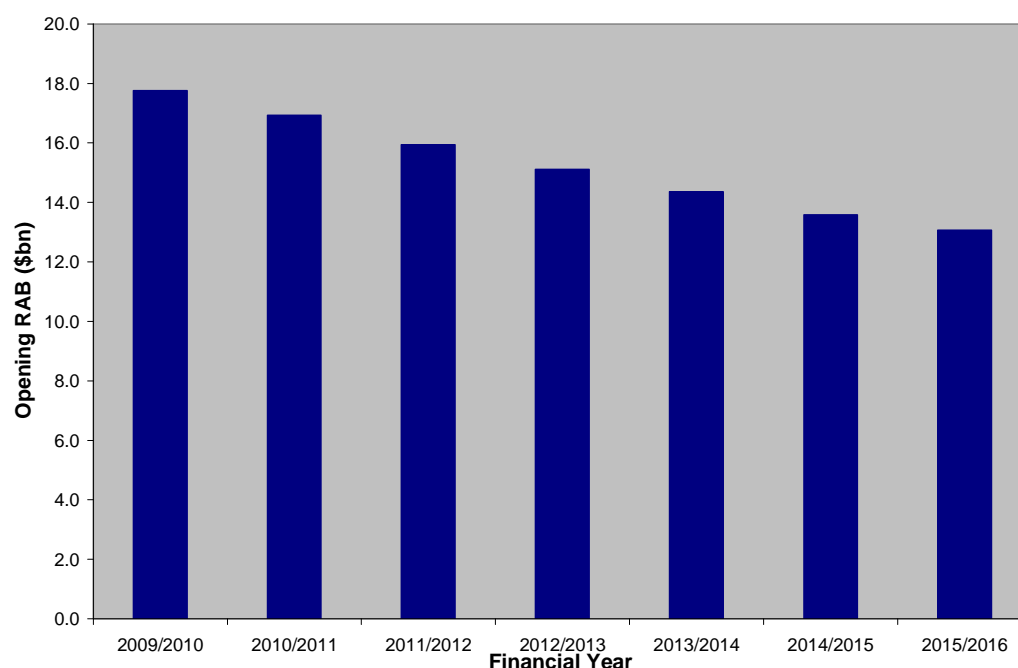
To estimate draft prices for the FADs, the ACCC has rolled forward the initial opening RAB value of \$17.75 billion using its proposed roll-forward mechanism. The opening RAB value as at 1 July 2011 is \$15.9 billion. Table 5.2 shows a reconciliation between the initial opening RAB value as at 1 July 2009 and the opening RAB value as at 1 July 2011. It also shows the opening RAB for each year of the proposed regulatory period and the contributions to changes in the opening RAB value from depreciation, capital additions and indexation of land values.

Table 5.2: Opening and closing RAB values, 2009-10 to 2015-16, and contributions to changes in RAB values

	Opening RAB (at 1 July, \$ billion)	Closing RAB (at 30 June, \$ billion)	Depreciation (\$ billion)	Capital additions (\$ billion)	Land value indexation (\$ billion)
2009–10	17.750	16.928	1.941	1.100	0.019
2010–11	16.928	15.934	2.007	0.993	0.020
2011–12	15.934	15.108	1.845	0.999	0.020
2012–13	15.108	14.361	1.757	0.988	0.021
2013–14	14.361	13.581	1.779	0.978	0.021
2014–15	13.581	13.057	1.514	0.968	0.022
2015–16	13.057	12.686	1.351	0.957	0.023

Note: The opening RAB is equal to the previous year's closing RAB.

The opening RAB values from 2009-10 to 2015-16 are also shown graphically in figure 5.1.



In the FLSM, the closing RAB each year is equal to the opening RAB in the following year. The opening RAB as at 1 July 2011 is therefore equal to the closing RAB as at 30 June 2010. The opening RAB as at 1 July 2011 falls from its 1 July 2009 value because depreciation exceeds the combined value of asset additions (that is, capital investment) and land value inflation. This reflects the declining trend in investment in network assets (see the relevant section in chapter 6 on capital expenditure). The trend continues over the regulatory period, leading to declining RAB values over time.

The ACCC proposes to adopt an opening RAB of \$15.9 billion as at 1 July 2011 for the purpose of estimating prices for the FADs. The ACCC further proposes that this initial RAB value determined for the FADs will be 'locked in' and rolled forward in subsequent years according to the roll-forward mechanism set out in chapter 6.

5.2 Asset classes to be included in the RAB

To determine the initial value of the RAB, the asset classes included in the RAB must be identified and then values must be assigned to those asset classes. For the purpose of estimating prices for the declared fixed line services, the asset classes in the RAB should be Telstra’s CAN and Core network assets used in providing those services.

September 2010 Draft Report view on assets classes

In the September 2010 Draft Report, the ACCC proposed to include the following CAN and Core assets in the initial RAB:

Table 5.3: Asset classes included in the RAB—September 2010 Draft Report

CAN Asset Class	Core Asset Class
<ul style="list-style-type: none"> ▪ Ducts and pipes ▪ Copper cables ▪ Other cables ▪ Pair gain systems ▪ Radio CAN ▪ Other assets 	<ul style="list-style-type: none"> ▪ Switching equipment - Local ▪ Switching equipment - Trunk ▪ Switching equipment - Other ▪ Inter-exchange cables ▪ Transmission equipment ▪ Radio bearer equipment ▪ Satellite equipment ▪ International network cables

The listed assets are joint or common assets. They are used to provide a number of services, including non-declared services. Only a proportion of the cost of these shared assets is allocated to the declared fixed line services (see chapter 10).

Three asset classes in the CAN and Core network — data equipment, mobile network and terminal equipment, and customer equipment — were excluded from the assets included in the RAB because these assets are not used by the declared fixed line services.

Submissions on asset classes

Telstra’s submission provided an alternative initial RAB value based on a different set of asset classes to those included by the ACCC in calculating an initial RAB value for the September 2010 Draft Report.

In November 2010, the ACCC sought further information from Telstra, including information on what assets, and RAF asset classes, are used to provide the declared fixed line services. Telstra’s November 2010 response indicated that two asset classes included by the ACCC are not used to provide the declared fixed line services. These are the ‘international network cables’ and the ‘satellite equipment’ asset classes.

Telstra also submitted that the ACCC did not include all of the assets used to supply the declared fixed line services in determining the initial RAB value. Specifically, the ACCC excluded indirect capital assets. In response to the ACCC’s November 2010 information request, Telstra advised that indirect capital assets were used to provide administration, human relations, accounting, IT and other indirect functions. It advised that indirect capital expenditure is reported under the RAF asset categories ‘non communications plant and equipment’ and ‘other non current assets’.

Telstra also advised in its November 2010 response that three additional asset classes are used to provide the declared fixed line services. These are ‘other communications plant and equipment’ (which includes CAN radio systems and some network support assets), ‘network land’ and ‘network buildings and support assets’. It also advised that the asset class ‘other non current assets’ includes some relevant land assets.

In its October 2010 submission, Telstra provided a copy of its asset register, which set out more detailed information about its assets and their depreciated actual values than is included in the RAF accounts.⁷⁵ In its November 2010 response to the ACCC’s information request, Telstra provided a reconciliation of the assets in its asset register against those in its RAF accounts.

ACCC view on asset classes

The ACCC has accepted Telstra’s advice on the network assets used to supply the declared fixed line services and adjusted the list of asset classes included in the RAB accordingly. The following ten CAN asset classes and 11 Core asset classes are included in the FLSM:

Table 5.4: Asset classes included in the RAB—ACCC revised view

CAN Asset Class	Core Asset Class
<ul style="list-style-type: none"> ▪ Ducts and pipes ▪ Copper cables ▪ Other cables ▪ Pair gain systems ▪ CAN radio bearer equipment ▪ Other CAN assets ▪ Other communications plant and equipment ▪ Network land ▪ Network buildings and support assets ▪ Indirect capital assets 	<ul style="list-style-type: none"> ▪ Switching equipment - Local ▪ Switching equipment - Trunk ▪ Switching equipment - Other ▪ Inter-exchange cables ▪ Transmission equipment ▪ Core radio bearer equipment ▪ Other communications plant and equipment ▪ Network land ▪ Network buildings and support assets ▪ Indirect capital assets ▪ LSS equipment

The ACCC has removed the two asset categories ‘international network cables’ and ‘satellite equipment’. It also removed some assets from the asset classes ‘local switching’, ‘pair gain systems’ and ‘transmission equipment’ that Telstra advised were not used in providing the declared fixed line services. This resulted in reductions to the depreciated values of those asset classes.

The ACCC has included the three additional asset classes ‘other communications plant and equipment’, ‘network land’ and ‘network buildings and support assets’, which Telstra advised are used to provide the declared fixed line services.

Telstra advised that the ‘other communications plant and equipment’ asset class includes assets like racks, tie cables and supporting ironwork that are used to provide fixed line services. The ACCC has allocated the relevant asset costs between the CAN and the Core network using two methods: (i) directly where the relevant assets are used only to provide CAN or Core services or (ii) in the same proportion as the allocations of ‘network building and support’ asset class to the CAN and Core network where the assets are used to provide both CAN and Core services.

The asset values for ‘network land’ and ‘network buildings and support’ asset classes provided by Telstra were not allocated between the CAN and Core network. The ACCC has used Telstra’s TEA model to estimate of the undepreciated value of land, buildings and network support assets included in the CAN. Since the TEA model does not include Band 4, the ACCC estimated the assets used to provide Band 4 services by reference to the shares of land, buildings and network support assets allocated to

⁷⁵ Additional Telstra submission to the ACCC’s *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, November 2010, (November 2010 Telstra submission), Schedule 1 and Schedule 2.

each band in the Analysys model. The resulting estimate of undepreciated asset values for ‘network buildings and support’ assets in the CAN is then depreciated using the depreciation levels obtained from the RAF. Land values are not depreciated.

Once the ‘network land’ value and depreciated value of ‘network buildings and support’ asset value have been allocated the CAN, the residual values for ‘network land’ and ‘network buildings and support’ are allocated to the Core network.

The ACCC has also included a new asset class in the CAN and the Core called ‘indirect capital assets’. This asset class includes line items 2-2-01-4 “Information Technology” and 2-2-05-4 “Other” from the RAF asset category ‘non-communications plant and equipment’ and line item 2-3-25-4 “Other” from the RAF asset category ‘other non-current assets’, to account for the indirect assets used to provide the declared fixed line services. The ACCC has apportioned the costs of these RAF line items between the CAN and the Core network based on the proportion of CAN and Core assets in the total RAB.⁷⁶

The CAN asset class ‘Other assets’ has been renamed ‘Other CAN assets’. This asset class corresponds to the RAF asset class ‘Other CAN’. It is made up entirely of customer access devices for Mux, which Telstra has advised are pair gain systems, line cards and CMUX equipment used to supply voice services such as WLR.

The ACCC has also added a new asset class ‘LSS equipment’ to allow it to estimate the LSS price in the FLSM (see chapter 12).

5.3 Valuation methodology

As noted in section 5.1 above, there is no uniquely ‘correct’ value for the initial RAB. There are a number of alternative valuation methodologies available to determine the initial RAB value. The choice of valuation methodology will involve an element of judgement, taking into account the factors relevant to the industry and regulated business.

RAB valuation methodology adopted in the September 2010 Draft Report

The ACCC considered a number of revenue-based and cost-based approaches to valuing the RAB. It recognised that DAC and DORC pricing methodologies both contain strengths and weaknesses.

The ACCC considered that the efficient ‘build/buy’ incentives promoted by a DORC approach are less relevant in the current environment of an aging copper network and the delivery of services across a variety of emerging technologies. It recognised that Telstra’s copper CAN clearly displays enduring bottleneck characteristics, rather than being a network likely to be bypassed through technological or market development. Inefficient duplication of CAN infrastructure is unlikely. The ACCC concluded that a replacement cost pricing approach like DORC, with its rationale of providing efficient ‘build/buy’ signals, is less applicable in the present environment.

The ACCC also highlighted its concern that a DORC valuation would compensate the access provider for investments it has not actually made and this could distort investment incentives. In addition, estimating hypothetical costs to obtain a DORC

⁷⁶ The CAN and Core proportions are based on the proportion of CAN and Core asset values in Schedule 2 of Telstra’s November submission. These values do not include the increment of \$1.44 billion to the value assigned to the ‘ducts and pipes’ asset class.

valuation would be a complex, subjective exercise that is less transparent and verifiable than using actual costs under a DAC approach.

In contrast, the ACCC considered that a DAC valuation methodology had the advantage of being a widely accepted pricing methodology that is objective and relatively simple to implement. A DAC valuation ensures that the access provider is able to achieve a commercial return on its actual investments. In doing so, it provides efficient investment incentives and avoids the risk of regulatory opportunism, which could deter the access provider (and other industry participants) from undertaking future investments in sunk assets. A DAC valuation approach would promote confidence by industry participants (and participants in other regulated industries) that the regulatory arrangements will permit them to recover the costs of their investments.

The ACCC noted that a shortcoming of a DAC approach derived from the limitations of the available historic cost records contained in the RAF accounts, particularly for the long lived assets like ducts, pipes, and copper cables. However, the RAF accounts represented the best available objective and independently verified information.

After weighing up the advantages and disadvantages of different valuation methodologies, the ACCC reached a preliminary view, in the September 2010 Draft Report, that adopting a DAC methodology to value the relevant telecommunications infrastructure would satisfy the LTIE and meet the legitimate commercial interests of the access provider.

Submissions on the RAB valuation methodology

Optus preferred a DAC methodology to value Telstra's network assets over a DORC approach. It stated that DORC is more complex, subject to a higher degree of uncertainty and more prone to modelling error and information asymmetry. It agreed that any possible efficiency advantages resulting from methodologies based on replacement cost, including DORC, are likely to be minimal in the current environment.

Macquarie Telecom noted that DORC suffers from a range of problems compared with DAC, which is relatively simple, objectively measured and well understood. On balance, it supported the ACCC's proposal to set the opening RAB using a DAC valuation methodology and the RAF values.

Herbert Geer supported the Commission's decision to replace TSLRIC+ with a RAB based on DAC methodology. However, it submitted that it was unreasonable to rely on approximate and incomplete RAF data when adopting a cost-based approach to valuing assets and that reliance on this data was inconsistent with the DAC methodology.

AAPT supported the use of DAC and the RAF accounts to establish the initial RAB. Frontier Economics also supported using the DAC method to set the initial RAB value.

In contrast, Telstra argued that the use of unindexed historic cost is not the appropriate valuation methodology. Telstra submitted that there is a considerable body of regulatory and legal precedent that endorses replacement cost, and DORC in particular, as an appropriate and reasonable valuation approach for establishing initial assets values in regulated industries. Telstra submitted that the ACCC's proposed approach causes significant asset devaluation by moving from a real asset value based on replacement costs to a nominal value based on depreciated accounting cost.

Telstra advocated the use of a DORC approach, taking the most recent DORC valuation used by the ACCC in determining indicative prices, and deducting depreciation since that date. If the ACCC were to decide to apply a DAC approach, Telstra considered that historic costs should be indexed. It stated that failing to take into account the effects of inflation on the value of the CAN and Core network would be contrary to Telstra's legitimate commercial interests.

Professor Yarrow (in a report submitted by Gilbert and Tobin on behalf of Telstra) submitted that what ultimately matters is the reasonableness of the price outcomes resulting from the chosen RAB value, rather than the valuation method. He stated that either DAC or DORC may provide a convenient method of 'getting to a fair and reasonable outcome'.⁷⁷

In regard to the use of an indexed DAC approach, Professor Yarrow considered that this approach would overcompensate for inflation unless the inflation allowance included in the previous WACC values used to set indicative prices was removed. He noted that:

given that the previous regime worked with a nominal interest rate, it can be argued that adjustments for inflation were arguably already made by the fact that the inflation component of the WACC compensated for the loss in real value of the capital stock over the relevant accounting period ... any (backward looking) upward, annual revaluations of capital to reflect changes in the general price level would arguably be cancelled out by the fact that in relation to the use of indexed historic costs that inflation component in the WACC would disappear in the IHC [indexed historic cost] approach.⁷⁸

That is, removing the inflation allowance provided for in previous WACCs, as required to avoid double compensation for inflation, would result in the indexed and unindexed DAC values giving the same RAB values.

The RBS stated that DAC does not guide either efficient usage or efficient investment decisions.

ACCC view on the proposed RAB valuation methodology

The ACCC considers that a suitable range of RAB values is set by the depreciated historic value of Telstra's investments in network assets (that is, DAC value) and by DORC. In determining this range for the purpose of the IADs, the ACCC took into account that:

- a DAC value would allow Telstra to recoup its actual investment costs and achieve a commercial return on those investments. A valuation method that valued sunk assets at less than their actual costs could, by creating a risk of 'regulatory opportunism', deter future investments in sunk assets by regulated businesses. Therefore, a DAC value sets the lower bound for the range of suitable RAB values.
- a DORC value would be compatible with the previous TSLRIC+-based approach to calculating ULLS prices, which used estimated ORC values for Telstra's assets. To ensure consistency with the actual cost foundation of the building block approach, an ORC value must be depreciated to reflect the age of Telstra's actual assets—therefore a DORC value must be used rather than ORC.⁷⁹ DORC values

⁷⁷ Yarrow submission, p. 5.

⁷⁸ *ibid.*, p. 13.

⁷⁹ In applying its previous TSLRIC+ approach, the ACCC used estimates of the hypothetical cost of replacing Telstra's network with new modern equivalent assets. Since these hypothetical assets were assumed to be new, there was no depreciation. In contrast, a building block approach

have been adopted in setting initial RAB values in other regulated industries, including the energy industry. Since DORC values derived from existing models are based on continued use of outdated copper-based technologies, and less-than-full optimisation of the network, the ACCC considers that currently available DORC values form an upper bound for the range of suitable RAB values.

After determining the suitable range of RAB values, the ACCC has considered whether a RAB value based on either end of this range would provide a sound basis for estimating prices. The ACCC is of the view that both valuation methods have considerable limitations.

A DAC valuation of Telstra's assets would necessarily be based on Telstra's RAF accounts because, as noted in the September 2010 Draft Report, the RAF data generally represent the most complete and accurate record of historic costs for the fixed line network.⁸⁰ In that report, however, the ACCC recognised the limitations of Telstra's RAF data, particularly for assets that were put in place many years ago when account keeping was generally less robust and Telstra was subject to less stringent accounting obligations and disclosure rules. The ACCC has in the past expressed concerns about the incomplete nature of Telstra's records on its long-lived network assets, particularly its ducts, pipes and copper cables.

Use of a DORC valuation method would require the ACCC to make many subjective judgements about the appropriate level of optimisation and the modern equivalent assets for the copper network. The ACCC has noted the criticisms by the Tribunal of existing TSLRIC+ models. It considers that, if a suitable model was available, a DORC value would be calculated using a fibre network, with a discount for the much higher service quality potential of fibre and a substantial depreciation allowance to take into account the age and deterioration of the existing copper network (compared to a new fibre network). No such model currently exists and timely development of such a model is not feasible.

Taking these considerations into account, the ACCC is of the view that neither the DAC nor DORC approaches taken alone would in themselves provide a sufficiently robust or reliable method for determining an initial RAB value. As noted in section 5.1, the ACCC used the DAC value that forms the lower bound of the suitable range as a starting point from which it developed a suitable RAB value. The more substantial limitations associated with obtaining a DORC value ruled it out as a starting point. The ACCC made two adjustments to the DAC value, which are explained in section 5.1.

The ACCC has also considered whether Telstra's current cost accounting valuation of its assets could provide a reliable basis for setting an initial RAB value. However, since these accounts provide indexed values for Telstra's assets calculated from the RAF accounts, they are subject to the same limitations as the RAF accounts as well as

requires a value to be placed on the actual assets being used to provide the services. This requires an allowance for depreciation to reflect the age of the actual assets in use.

⁸⁰ The asset values in the RAF accounts generally use information from Telstra's asset register, which provides a more disaggregated record of historic costs. The main exception is land assets, which, in Telstra's asset register, have been revalued from time to time and indexed by the CPI to reflect the typical appreciation of land assets over time. In addition, land assets are not depreciated in Telstra's asset register.

any shortcomings in the indexation methodology applied by Telstra.⁸¹ Furthermore, the ACCC agrees with Professor Yarrow's view that indexing the value of the assets included in the RAB would result in double-counting of inflation when a nominal WACC (which includes an inflation allowance) has been applied in determining access prices. The exception is land values, which are discussed in section 5.4 below.

5.4 Valuation methodology for land assets

Land assets are used to provide the declared fixed line services. A value needs to be assigned to these assets in establishing the initial RAB value.

September 2010 Draft Report view on the valuation methodology for land assets

Since the RAF accounts do not separately identify land assets, the ACCC was unable to identify the land assets included in RAF asset classes. Therefore land assets were treated in the same way as the other assets included in the September 2010 Draft Report.

Submissions on the valuation methodology for land assets

Telstra submitted that the ACCC incorrectly depreciated land assets at the same rate as equipment included in the relevant asset class. Telstra argued that because land typically appreciates and does not deteriorate over time like other assets, it should not be depreciated. It argued that land asset values should be indexed to reflect the appreciation of land values over time.

In response to the ACCC's November 2010 request for information, Telstra advised that network land assets are included in the 'other non current assets' asset class in the RAF. It also provided data on the historic cost and indexed values of its land assets from its asset register. Land values were indexed by the CPI.

ACCC view on the valuation methodology for land assets

The ACCC is of the view that the value of land assets should be indexed to reflect the appreciation of land values over time. The ACCC proposes to adopt the land values provided by Telstra which Telstra has indexed by the CPI since its last revaluation of land assets in 1991-92.⁸² It proposes that no depreciation be allowed for land assets in the FLSM.

The ACCC intends to adopt this approach in determining the initial RAB value.

5.5 Past cost recovery

An important objective of the BBM approach is to allow the access provider to recover its previous costs of investing in sunk infrastructure as well as its efficient and prudent costs of investment in new network assets. The Tribunal has expressed similar views, stating that the access provider's legitimate business interests would be met by access prices that allow it to receive a commercial return on its prudent (past) investment in infrastructure.⁸³

⁸¹ Telstra's indexation methodology in its current cost accounts is not transparent so the ACCC is unable to assess its appropriateness.

⁸² Telstra submission, p. 78.

⁸³ *Application by Telstra Corporation Limited ABN 33 051 775 556* [2010] ACompT 1 at [244].

September 2010 Draft Report view on past cost recovery

In the September 2010 Draft Report, the ACCC stated that past depreciation received by Telstra should be taken into account when setting the initial RAB and that no further adjustments for past over- or under-recovery should be made after the initial RAB is set. This would ensure that access seekers are not charged more than once for Telstra's costs of investing in the existing assets and that prices reflect the actual costs of investment. The ACCC proposed to take into account the past depreciation included in Telstra's RAF accounts.

Submissions on past cost recovery

A number of submission argued that Telstra has recovered more than straight line depreciation in the past, suggesting that a lower initial RAB valuation should be adopted.

Frontier Economics (on behalf of the CCC) argued that Telstra has almost certainly recovered far more than straight line depreciation. It stated that the opening RAB value could therefore be lower without adversely affecting Telstra's incentives to invest.

AAPT stated that the value of Telstra's assets should be reduced by the actual compensation received by Telstra to date and not by straight line depreciation.

Optus supported taking account of past recovery by Telstra to avoid double recovery of investment costs, which would occur if past depreciation of existing assets was not taken into account. It stated that Telstra should be able to recoup no more than its actual investments in the network.

In contrast, Professor Yarrow (in a report submitted by Gilbert and Tobin on behalf of Telstra) argued that setting the initial RAB in a way that ensures that only normal returns are made in the past (that is, 'clawing back' past economic profit) may contribute to a regulatory reputation for opportunism and may weaken regulatory certainty and predictability.

Telstra submitted that the ACCC's proposed approach would prevent Telstra from recovering a large amount of deferred depreciation that was previously back loaded by the ACCC under its tilted annuity approach. Telstra stated that unrecovered deferred depreciation amounted to \$31.9 billion. Telstra considered that \$18.6 billion (being the difference between its estimate of unrecovered depreciation and the ACCC's draft initial RAB value of \$13.3 billion) would become 'stranded' by the ACCC's proposed RAB valuation methodology.

Telstra rejected arguments that revaluing its assets on the basis of TSLRIC+ had allowed it to recover more than the investment costs actually incurred and costs that it had not incurred. It argued that asset revaluations were 'completely offset by the back loading (tilting) of capital recovery typical of tilted annuities'.⁸⁴ Telstra also argued that changing the depreciation method, by moving from a TSLRIC based asset valuation methodology to a RAB-based approach, part way through the lives of its network assets would prevent it from fully recovering its investment costs.

⁸⁴ Telstra submission, Schedule 1 - Asset Valuation, Depreciation and Cost Recovery, p. 9.

ACCC view on past cost recovery

Telstra's arguments about 'stranded' depreciation rest on an assumption that Telstra's assets were generally new when the TSLRIC framework commenced. The ACCC considers that Telstra's assumption is not supported by the facts.

If the majority of Telstra's assets were new when the TSLRIC framework commenced, it is possible that a move from the TSLRIC+ asset valuation approach (with a tilted annuity depreciation method) to a BBM methodology (with straight line depreciation) may lead to Telstra not recovering its investment costs.

However, many assets comprising Telstra's fixed line network were not new when the TSLRIC regime began. From the information provided by Telstra from its asset register, which sets out actual investment undertaken since 1968 for the CAN and 1960 for the Core, it is evident that a large proportion of assets were in place prior to the commencement of the TSLRIC framework in 1997. The older Telstra's assets were at the commencement of the TSLRIC framework, the greater the likelihood that the combination of the tilted annuity and revaluation of the asset base under the previous approach has resulted in net over-recovery of investment costs when moving from a TSLRIC+ methodology to a BBM approach.

Telstra has indicated that many of its assets continue to be in use significantly past their assumed asset lives for depreciation purposes. It submitted that:

Telstra has some assets which have been fully depreciated for accounting purposes – and so have been removed from the asset register – but that are still in active use.⁸⁵

Telstra provided examples of assets that have been fully depreciated but remain in use, including:

- tunnel networks in major capital which were constructed in the early 20th century and are still used
- copper cable and pit and pipe networks throughout Australia
- various group assets still in active use which have been automatically retired from Telstra's asset register at the end of their original service lives, including huts, shelters, pits and pipes and some software systems.⁸⁶

Under the previous TSLRIC+ regime, Telstra received a return on and of capital on assets that continued in use after they were fully depreciated.

It is impossible to reach definitive conclusions about the level of Telstra's past cost recovery on the basis of the available data. However, the ACCC considers that available evidence from Telstra's RAF accounts, asset register, annual reports and additional evidence provided in its October and November 2010 submissions suggests that Telstra is unlikely, on average, to have under-recovered depreciation on its network assets under the previous TSLRIC+ approach.

See section 5.7 for a more detailed technical discussion of the relationship between asset age and the recovery of depreciation in moving from a TSLRIC approach to a BBM approach.

⁸⁵ Telstra submission, p. 46.

⁸⁶ November 2010 Telstra submission, p. 13.

5.6 Asset lives

Estimated asset lives for the assets in the CAN and Core network are required to determine a depreciation schedule for those assets and to estimate past recovery of depreciation. Because the majority of these assets are not new, and have therefore already been partly depreciated, their remaining asset lives must be calculated to set the period over which the remaining depreciation will be recovered.

Each asset class contains a mixture of assets put in place at different times. For the purposes of the FLSM, an average asset life and average remaining asset life must be estimated for each asset class. Using average asset lives is a simplifying assumption since developing a full investment and depreciation profile for all existing assets from the date when they were put in place is not feasible.

September 2010 Draft Report asset lives

For the September 2010 Draft Report, the ACCC sought information from Telstra on average total and remaining asset lives for the CAN and Core assets. Telstra advised it was unable to provide reliable information.

Consequently, the ACCC estimated average asset lives for the CAN assets based on the asset lives used in Telstra's TEA model. Remaining asset lives were calculated by applying the estimated undepreciated percentage of each asset class multiplied by the average asset life for that class. For the Core network, the ACCC estimated average asset lives using the asset lives included in the Analysys cost model.

The ACCC noted a number of qualifications on the reliability of its method of estimating total and remaining asset lives. At the time, these were the most reliable available estimates of the asset lives for the fixed network assets.

Submissions on asset lives

A number of submissions commented on the appropriate asset lives for Telstra's fixed network assets.

Frontier generally supported the ACCC's methodology for estimating asset lives in the absence of better information from Telstra. However, it questioned the ACCC's assumption of a conservative average asset life for 'ducts and pipes' of 30 years.

Herbert Geer stated that Telstra is bound by accounting standards to state the remaining service lives of its assets and noted that Telstra includes remaining service lives of significant items of property, plant and equipment in the notes to its financial statements. Herbert Geer submitted that it is not reasonable to set average asset lives for Telstra's assets when these assets have been put in place over a number of years, with some being relatively new and others much older.

Telstra submitted that depreciation should be calculated by reference to each asset's economic life rather than its technical life. It submitted a report by RBB Economics⁸⁷ setting out estimated asset lives based on Telstra's accounting data, its annual Asset Service Life Review Process and international benchmarking. RBB Economics truncated the estimated asset lives for some of Telstra's fixed assets where it considered the NBN roll-out would reduce the economic life of the asset.

Telstra argued that truncation of the lives of assets that will no longer be used after the NBN is rolled out would allow it to recover all remaining depreciation on those assets

⁸⁷ George Siolis, *RBB Economics: Service lives for Telsra's fixed network assets*, October 2010.

before the relevant lines are migrated to the NBN. It stated that, if depreciation was not front loaded in this way, it would not be able to recover its full capital costs for those assets.

ACCC view on past cost recovery

The ACCC has revised the asset lives for some asset classes based on the additional, more detailed information provided by Telstra. Where an asset class comprises several asset types with different asset lives, a weighted average of the asset types has been calculated to obtain an average total asset life.

The ACCC has maintained the approach adopted in the September 2010 Draft Report to calculate remaining asset lives for each asset class. The ACCC has not accepted Telstra’s arguments for truncating asset lives and thereby front-loading depreciation. The ACCC considers that payments under the proposed deal between Telstra and the NBN Co are likely to compensate Telstra for unrecovered depreciation on assets no longer used to provide fixed line services following the roll-out of the NBN.

Tables 5.5 and 5.6 below show the revised average and remaining asset lives for each asset class used in the FLSM. Table 5.7 sets out the total and remaining asset lives assigned to asset classes added to the RAB since the September 2010 Draft Report.

Table 5.5: Revised estimated average and remaining asset lives by CAN asset class

Asset class	Average asset life	Remaining asset life
Ducts and pipes	35	[REDACTED]
Copper cables	20	[REDACTED]
Other cables	20	[REDACTED]
Pair gain systems	12	[REDACTED]
CAN radio bearer equipment	12	[REDACTED]
Other CAN assets	12	[REDACTED]
Other communications plant & equipment	[REDACTED]	[REDACTED]

Table 5.6: Revised estimated average and remaining asset lives by Core asset class

Asset class	Average asset life	Remaining asset life
Switching equipment - Local	27	[REDACTED]
Switching equipment - Trunk	25	[REDACTED]
Switching equipment - Other	20	[REDACTED]
Inter-exchange cables	38	[REDACTED]
Transmission equipment	[REDACTED]	[REDACTED]
CORE radio bearer equipment	16	[REDACTED]
Other communications plant & equipment	[REDACTED]	[REDACTED]

Table 5.7: Estimated average and remaining asset lives for added asset classes

Asset class	Average asset life	Remaining asset life
Network land	10 000	10 000
Network buildings & support	[REDACTED]	[REDACTED]
Indirect capital assets	10	[REDACTED]

The ACCC has increased the total asset life for ducts and pipes to 35 years. This value is in line with the Analysys Cost model and Telstra’s submission which shows a total asset life for distribution ducts and pipes at [REDACTED] and main ducts

and pipes at [REDACTED]. The asset life for transmission equipment has been increased from 10 years to [REDACTED] years to reflect information provided by Telstra.

The inclusion of additional asset classes in the RAB required new asset lives to be estimated. Land assets have been assigned an asset life of 10,000 years for the purposes of the FLSM to ensure that depreciation of land assets is negligible. The total asset life for 'network buildings and support' assets has been estimated as a weighted average of the asset lives for the network buildings, network support and network power components provided by Telstra from its asset register. The remaining asset life for 'network buildings and support' assets has been calculated by multiplying each component's depreciation level by its respective total asset life and deriving the weighted average remaining asset life across the three components of the asset class.

For asset classes labelled 'other', the ACCC has examined the assets comprising these asset classes. Where the assets are similar to the assets contained in another FLSM asset class, the ACCC has applied the asset life of that asset class as a proxy. For example, the 'other CAN assets' asset class is made up entirely of Mux equipment. Since Mux equipment is also located in the 'pair gain systems' asset class, the 'other CAN assets' asset class has been assigned the same total and remaining asset life as the 'pair gain systems' asset class.

For the 'other communication plant and equipment' asset class Telstra advised that 'other communication plant and equipment' assets are composed of CAN radio equipment and building assets.⁸⁸ The CAN asset life for 'other communication plant and equipment' is a weighted average of the asset lives for CAN radio equipment and building assets. The Core equivalent of this asset class is made up entirely of building assets so the asset life for the building component of 'network building and support' asset class has been applied to this asset class.

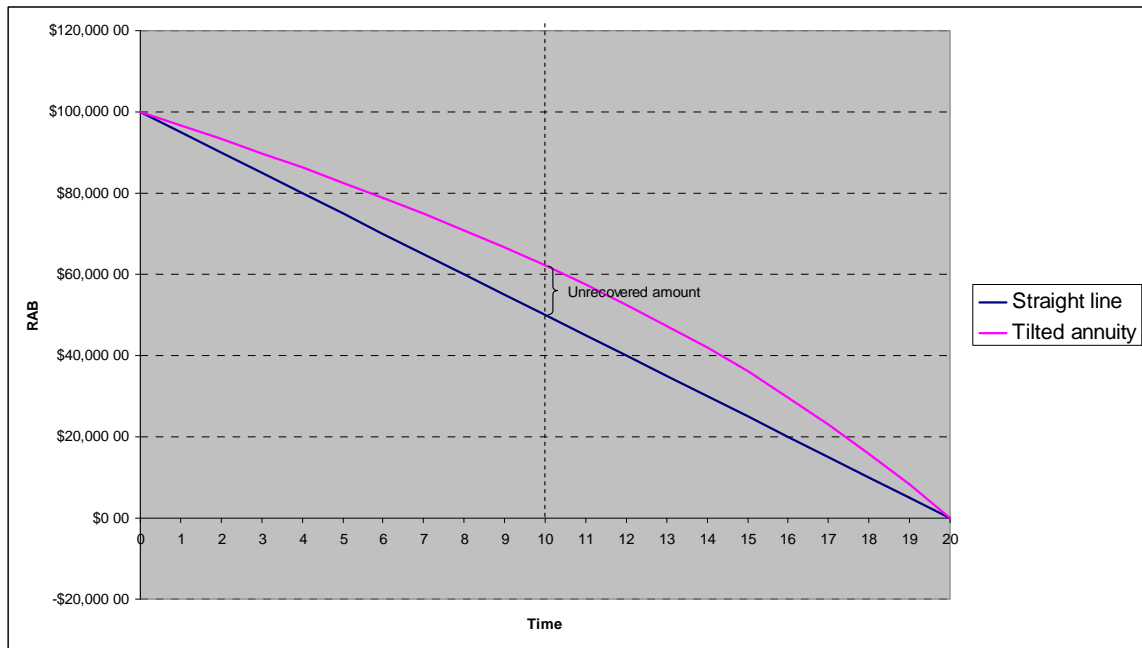
'Indirect capital assets' cover a range of assets that contribute indirectly to the network. These assets can range from long lived building assets (with asset lives of more than 20 years) to much shorter-lived information technology assets (with asset lives of 5 years). In the absence of information about the weights of different assets within the asset class, the ACCC has adopted a conservative average asset life of 10 years. It has assumed the asset class is 50 per cent depreciated which gives a remaining average asset life of 5 years.

5.7 Technical discussion of past recovery of depreciation

Telstra has submitted that in moving from a TSLRIC+ approach (with a tilted annuity depreciation method) to a building block approach (with straight line depreciation) will result in substantial under-recovery of depreciation, which it has called 'stranded depreciation'. It has illustrated this argument with a graph similar to figure 5.2 below.

⁸⁸ November 2010 Telstra submission, Schedule 2.

Figure 5.2



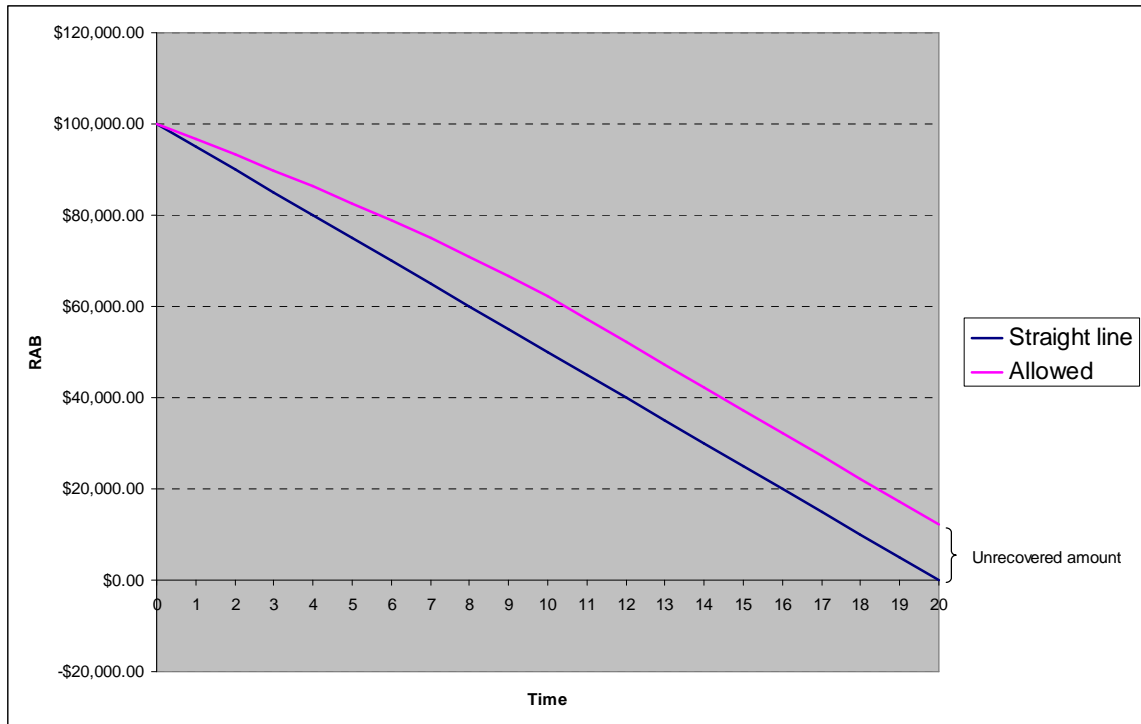
In the above example, a new \$100,000 asset with a 20 year asset life is depreciated using a tilted annuity approach. The ACCC's previous approach involved annual revaluation of the network and set the tilted annuity as first year's annuity each year. Assuming annual revaluations and the tilt are set using the same price change parameter, the original asset value will be fully recovered.

However, straight-line depreciation produces a different depreciation profile such that after ten years, depreciation under tilted annuity approach is less than that under straight-line approach. This is represented by the difference in figure 5.2.

If a TSLRIC+ and titled annuity approach is adopted for the first ten years of the asset's life, the depreciated asset value will be shown by the upper line in figure 5.2. The regulator switches to the straight line depreciation method after the tenth year and sets the RAB value on the basis of DAC assuming that straight line depreciation was applied over the previous ten years. The depreciated value of the asset will fall. The loss of value is shown by the vertical line marked 'unrecovered amount', which represents unrecovered depreciation.

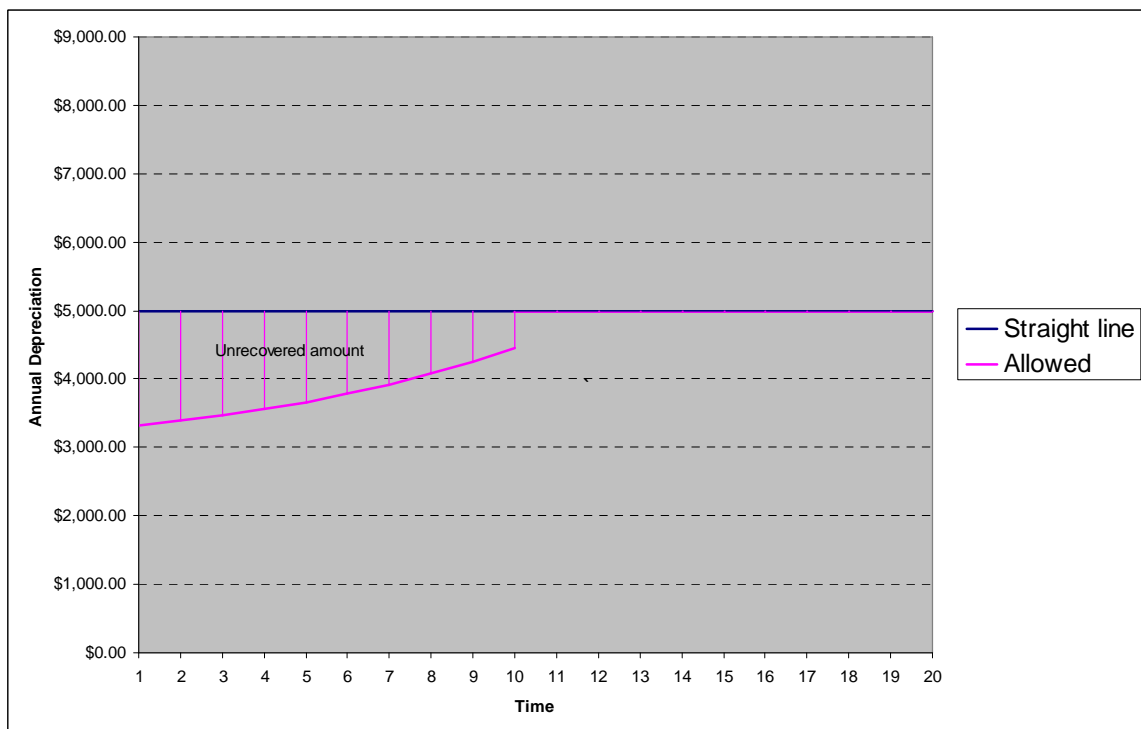
In this example, the initial cost of the asset will not be fully recovered by the end of its life at 20 years. This is illustrated in figure 5.3 below:

Figure 5.3



The unrecovered amount here is the same as that in figure 5.2. By switching to a DAC based RAB, with straight line depreciation based on the original asset value, Telstra would expect to under-recover depreciation on this asset. Figure 5.4 illustrates the under-recovery by comparing the allowed tilted annuity depreciation with straight line depreciation over the asset. The area between the curves equals the unrecovered amount:

Figure 5.4



However, the above example illustrates the worst-case scenario, that of a new asset. In reality, Telstra's assets have different asset lives so that the proportion of the asset life for which the tilted annuity was in operation varies for different assets. Further, and most critically, all assets were not new when regulation came into existence.

To illustrate, consider the following example. Assume a new asset with a 20 year life, as in the first example, with the difference being that the regulatory period only operates for 25 per cent of its asset life. In this case, the amount of under-recovery is much smaller than in the first example, as shown in figures 5.5 and 5.6.

Figure 5.5

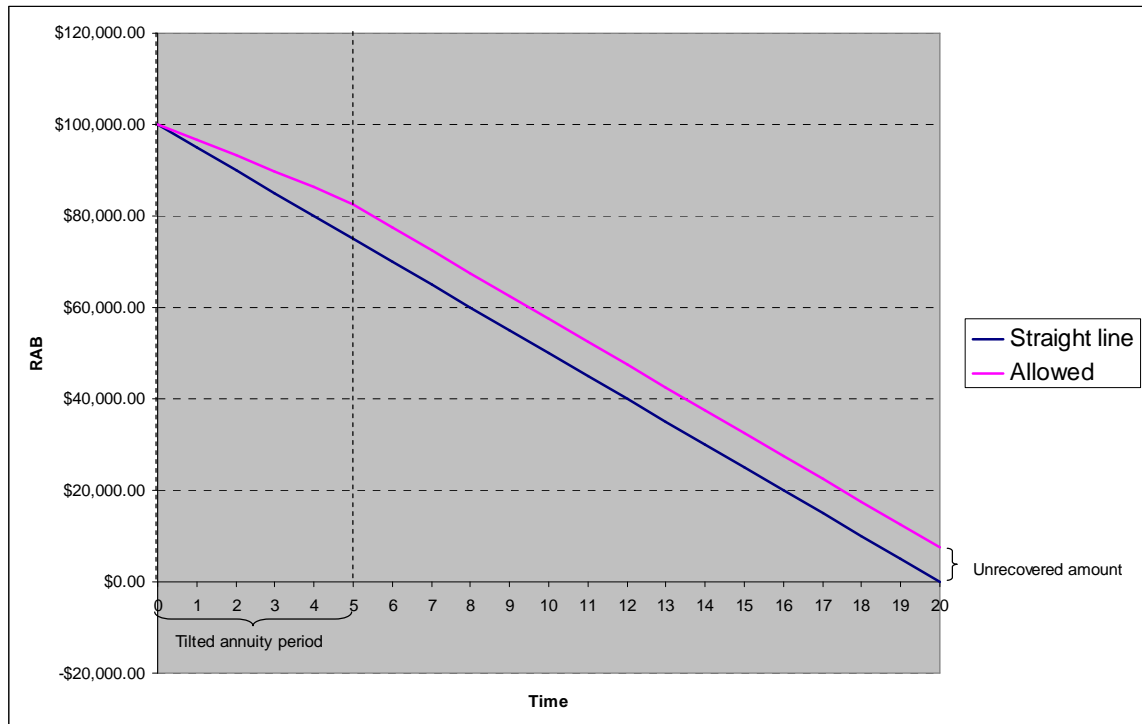
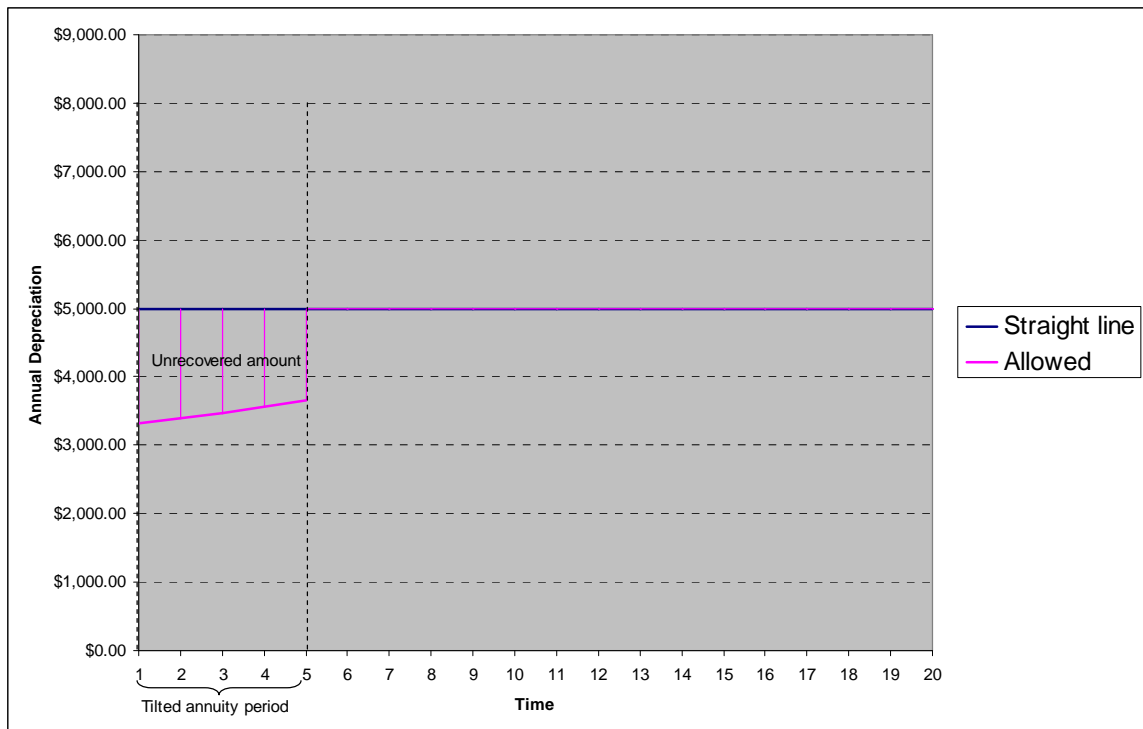


Figure 5.6



Many assets comprising Telstra’s fixed line network were not new when the regulatory regime began. Consider the same asset from the previous example, with the difference that it was five-years old when regulation commenced. The asset is revalued when regulation begins, and a tilted annuity is calculated based on this new value, rather than its depreciated actual cost. In this example, moving from the tilted annuity approach to straight line depreciation will result in much lower under-recovery, as shown in figures 5.7 and 5.8.

Figure 5.7

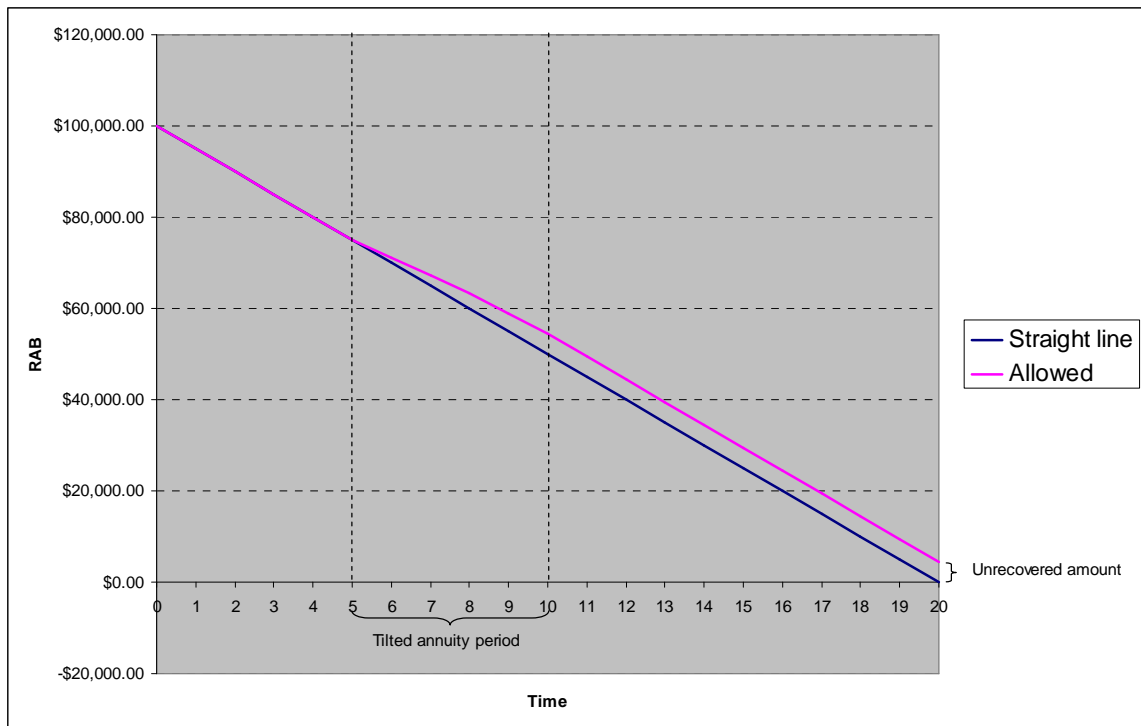
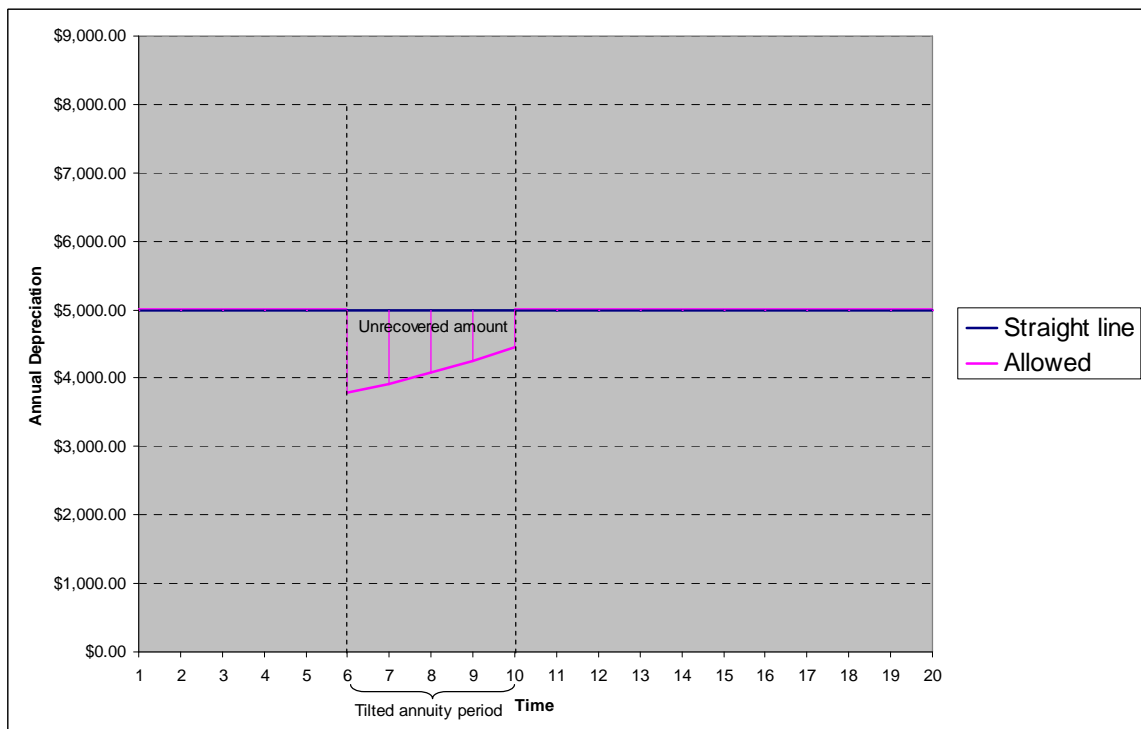


Figure 5.8



If the asset is assumed to be 50 per cent depreciated when regulation commences, the outcome is reversed. As illustrated by figures 5.9 and 5.10, the combination of tilted annuity and revaluation of the asset base under the previous approach would result in net over-recovery of depreciation. Under-recovery at the start of the TSLRIC regulatory regime is more than offset by subsequent over-recovery.

Figure 5.9

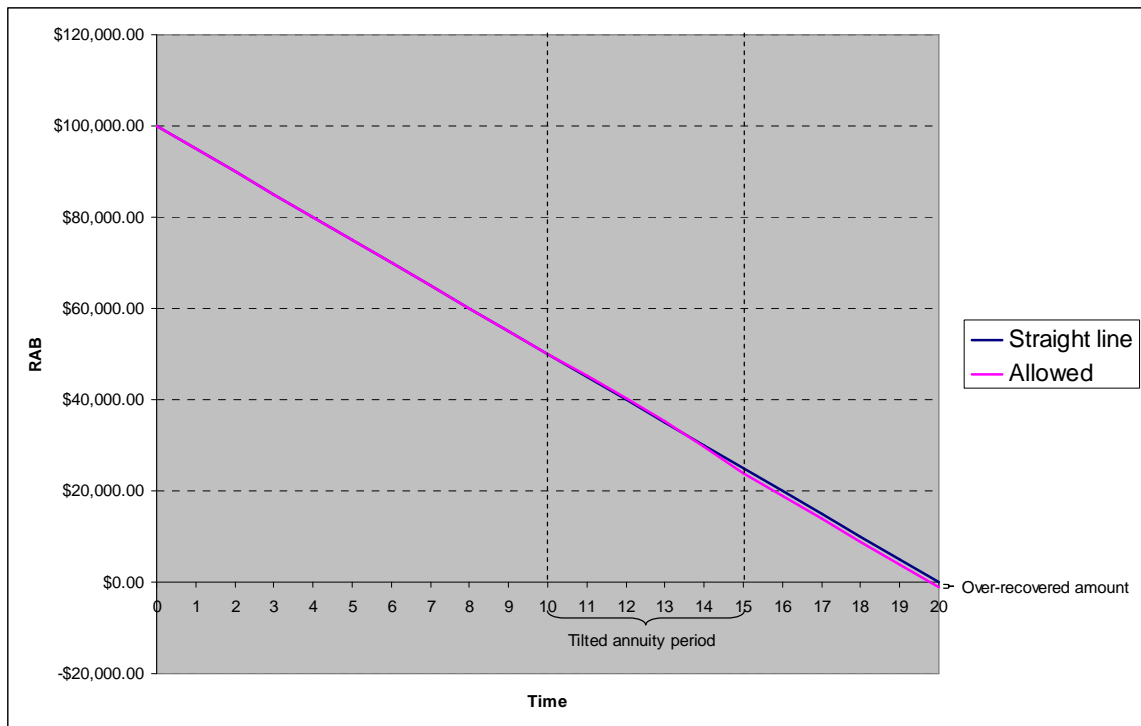
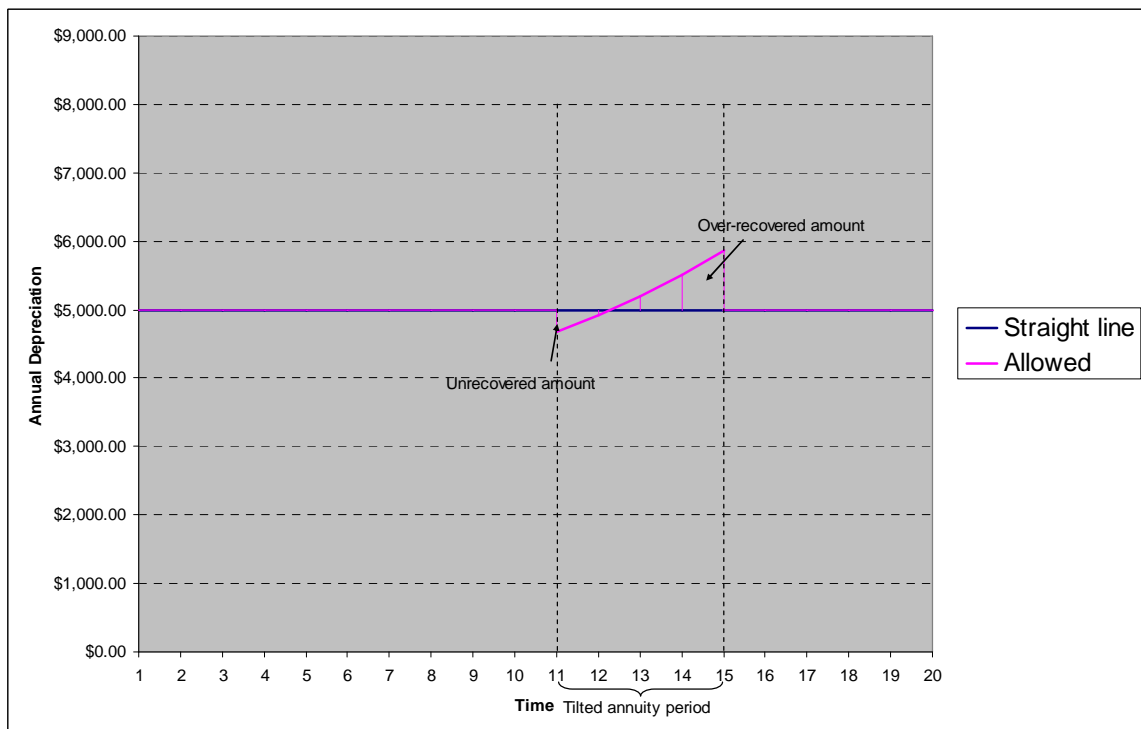


Figure 5.10



Over-recovery of depreciation is greatest for assets at the end of their lives when TSLRIC-based regulation commences. For these assets, a TSLRIC approach and tilted annuity results in significant over-recovery, as shown in figures 5.11 and 5.12.

Figure 5.11

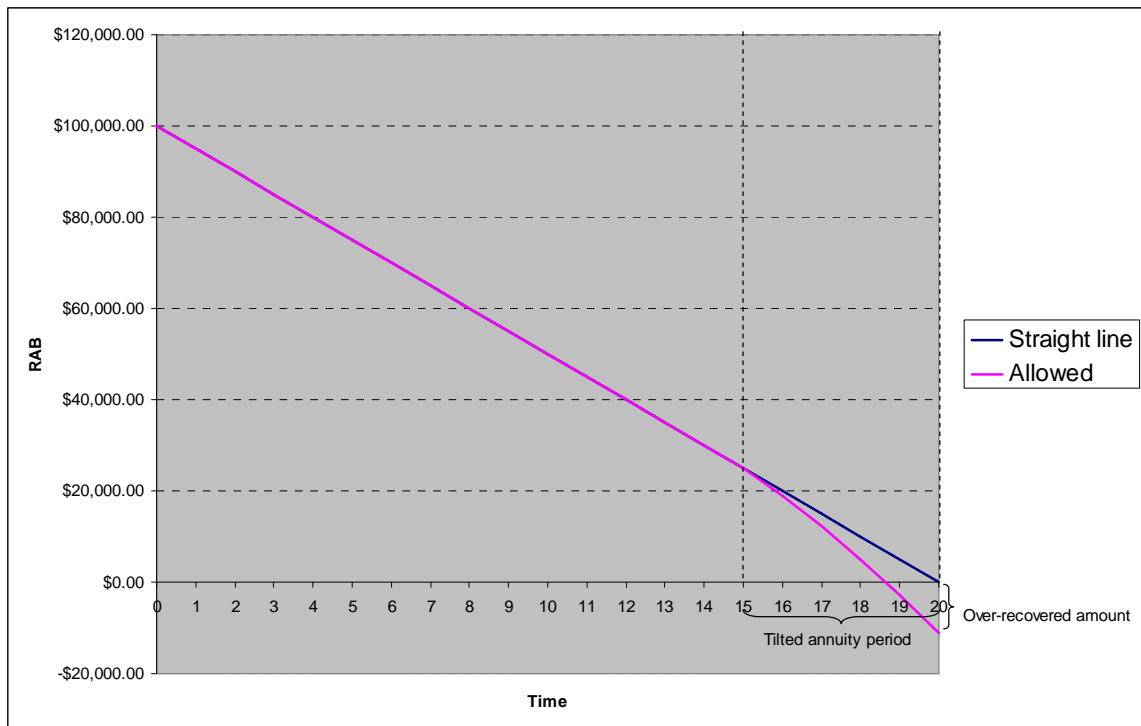
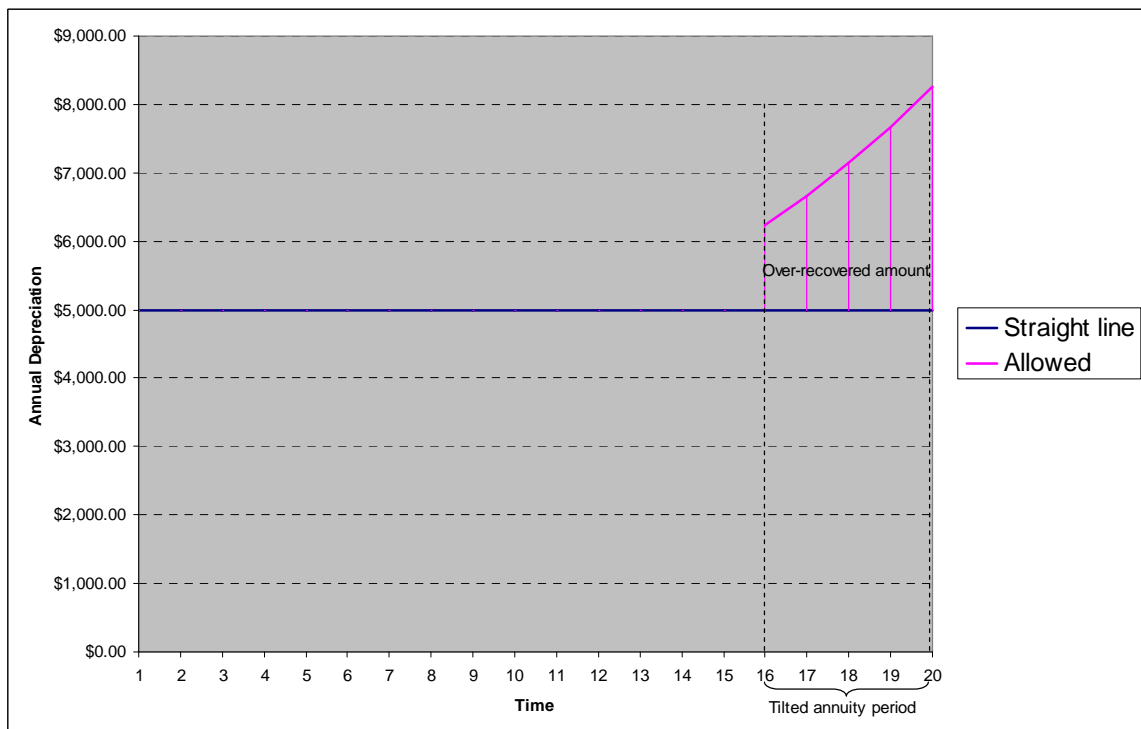


Figure 5.12



In addition, some assets in Telstra’s fixed line network would have been fully depreciated but still in use at the time regulation commenced. Other assets would have become fully depreciated but remained in use during the previous TSLRIC regime.

The previous TSLRIC approach assumed, but did not require, that assets past their assumed asset lives would be replaced with new assets. For assets that were fully

depreciated but still in use when the TSLRIC approach was adopted, all depreciation obtained under the TSLRIC approach represented over-recovery of depreciation.

The extent of actual under or over-recovery of depreciation will therefore depend on the ages of Telstra's assets when regulation commenced and their asset lives. It is not possible, on the information available to the ACCC, to calculate whether there has been net under or over-recovery on balance.

6 Capital expenditure

Key points

- The ACCC proposes to establish a roll-forward mechanism to update the RAB each year for forecast capital expenditure, depreciation and asset disposals.
- Land assets are treated differently to other assets. In rolling forward land values, land assets are not depreciated and their values are indexed by the CPI.
- Capital expenditure forms a component of the revenue requirement through the return on capital and return of capital (regulatory depreciation).
- The ACCC has revised its September 2010 capital expenditure forecasts based on projections provided by Telstra, submissions and its own analysis. Forecast capital expenditure is expected to decline in real terms over the period 2010-11 to 2015-16.
- The ACCC proposes to make no adjustments for ‘unders or overs’ in actual expenditure, compared to forecast expenditure, during the regulatory period.
- The ACCC proposes to adopt the straight line depreciation method.
- The ACCC has adopted a nominal vanilla WACC of 9.04 per cent (6.25 per cent real), based on the following parameters:

Input	ACCC proposed approach
Risk-free rate	Based on the 10 year Commonwealth Government Securities bond yield, using an averaging period of 20 business days. The nominal risk-free rate used to set IAD prices was 5.61 per cent.
Market risk premium	Set at the historic level of 6 per cent.
Equity beta and asset beta	Set at 0.7 for consistency with the approach adopted in previous ACCC and AER decisions.
Equity issuance costs	The ACCC proposes to exclude equity issuance costs from the WACC.
Debt risk premium	Based on the difference in yield between a Telstra bond rate with 10 years to maturity and the 10 year CGS rate. The DRP used to set IAD prices was 2.19 per cent.
Gearing ratio	Set at 40 per cent debt and 60 per cent equity.
Debt issuance cost	Updated using the methodology developed by Allen Consulting Group (ACG). The debt issuance cost used to set IAD prices was 8.3 per cent.
Debt beta	The ACCC proposes to set the debt beta at zero per cent.
Gamma (imputation factor)	Set at 0.45 to represent a benchmark economy-wide value, based on the most recent available empirical data.

Capital costs comprise two cost blocks in the building block approach—the return of capital (regulatory depreciation) and a commercial return on capital. To calculate

these costs for each year of the regulatory period, the RAB must be rolled forward to account for net capital investment during the previous year.

This chapter describes the proposed roll forward mechanism and sets out the ACCC's proposed capital expenditure forecasts, WACC parameter estimates, and proposed depreciation methodology.

6.1 Rolling forward the RAB

The FLSM rolls forward the RAB at the end of each year to determine the opening value of the RAB for the next year. The roll-forward process updates the RAB to reflect forecasts for capital expenditure, depreciation and asset disposals for that year.

6.1.1 ACCC's approach in September 2010 Draft Report

The ACCC proposed to roll forward the RAB each year using the following roll-forward equation:

$$RAB_{t+1} = RAB_t + capex_t - depreciation_t - asset\ disposals_t$$

where RAB_{t+1} = opening RAB for the next regulatory year

RAB_t = opening RAB for the current year

$capex_t$ = forecast capital expenditure during the current year (after the half-WACC adjustment)

$depreciation_t$ = depreciation during the current year

$asset\ disposals_t$ = asset disposals during the current year

The opening RAB for the next regulatory year is equal to the closing RAB for the current year.

As shown in the roll-forward equation, capital expenditure is added to the RAB through the roll-forward process. Capital expenditure contributes to the revenue requirement through the return on capital (given by the product of the WACC and the RAB value) and through the return of capital (regulatory depreciation). This method ensures that investment costs are recovered over the lives of the relevant assets rather than all at once in the year in which the capital expenditure occurs (in contrast to operating expenditure which is added directly to the revenue requirement in the year in which it occurs).

Capital expenditure is assumed to be incurred evenly across the year. This is equivalent to all capital expenditure being undertaken half-way through the year. To provide a return on the capital expenditure undertaken during the year, the FLSM includes a half-WACC adjustment. Using this method, capital expenditure in a particular year has no impact on the revenue requirement for the year in which it occurs. Rather, in the following year, the previous year's capital expenditure plus the half-WACC adjustment is fully incorporated into the RAB. The half-WACC adjustment 'grosses up' the unadjusted capital expenditure before it is rolled into the RAB according to the following equation:

$$capex_t = capex_{t,u} * (1+WACC)^{1/2}$$

where $capex_t$ = forecast capital expenditure during the current year after the half-WACC adjustment

$capex_{t,u}$ = unadjusted forecast capital expenditure during the current year before the half-WACC adjustment

To calculate the opening RAB for subsequent regulatory periods, the closing RAB for the previous period (calculated using the roll-forward equation) will be adjusted for inflation using the CPI to convert it into the price level used as the updated base year for the next regulatory period. This adjustment is necessary to re-base the real asset values used in the FLSM to the updated base year for each successive regulatory period (see section 4.3.3).

As noted in chapter 8, all tax liability calculations are undertaken in nominal terms. In the FLSM, the tax RAB roll-forward mechanism is conducted in nominal terms with an explicit inflation adjustment applied to the RAB for each year of the regulatory period.

The ACCC considered that the roll-forward mechanism proposed in the September 2010 Draft Report would provide certainty and transparency in the valuation of the RAB over time.

6.1.2 Submissions on RAB roll-forward process

Telstra submitted that there were two errors in the way the RAB roll-forward process was implemented in the FLSM. First, it stated that net capital additions for 2009-10 were not depreciated. Second, that the half-WACC adjustment was not added to the capital expenditure rolled into the following year's opening RAB.

Herbert Geer (on behalf of iiNet, Internode and Adam Internet) questioned whether the half-WACC adjustment would appropriately compensate Telstra for its actual capital costs and asked the ACCC to explain why it considered that any potential overcompensation was likely to be minor.

6.1.3 ACCC response

The ACCC has revised the FLSM to ensure that capital net additions for 2009-10 are correctly depreciated and that annual net capital additions are adjusted by the half-WACC multiplicative factor before being rolled into the RAB at the close of the year.

The tax RAB roll-forward process incorporates a half-WACC adjustment for consistency in the treatment of capital expenditure in the FLSM.

The ACCC considers that any over-compensation related to the half-WACC adjustment is unlikely to be significant unless the actual timing of capital expenditure is always concentrated at the end of the financial year. Where capital expenditures are undertaken fairly evenly throughout the year, the assumption underlying the half-WACC adjustment is likely to provide a good approximation of reality. Given that Telstra undertakes a large number of relatively small capital projects (compared to other utilities that undertake a small number of large, lumpy investments), the ACCC considers the assumption that capital investment occurs over the course of the year is appropriate.

Since the September 2010 Draft Report, the ACCC has revised its treatment of land asset values in the FLSM (see chapter 5). Land assets are indexed by the CPI to reflect the fact that land does not depreciate but generally appreciates in value over time. Land assets are therefore treated differently to other assets in the RAB roll-forward process. After adding net additions to the current year's opening RAB value for land

assets, the value of land assets is indexed by forecast inflation before it is rolled into the next regulatory year's opening RAB.⁸⁹

At the commencement of the next regulatory period, the opening RAB value will need to be expressed in the updated base year dollars used for the regulatory period. This will require the closing RAB value for the previous period (expressed in the base year dollars for that period) to be inflated by the movement in the CPI between the previous period's base year to the updated base year. This adjustment will simply convert the real values for all assets included in the RAB, including land assets, so that they are all expressed in the updated base year dollars for the next regulatory period. This updating adjustment should not be viewed as double-indexing of land values. The purpose of the adjustment is to ensure that the real calculations undertaken in the FLSM are all carried out in the updated base year dollar. No indexing of RAB values occurs in re-basing asset values to an updated base year.

6.2 Capital expenditure

The FLSM requires capital expenditure forecasts as an input into calculating prices for the declared fixed line services for the estimation period. As explained in section 6.1 above, forecast capital expenditure is rolled into the RAB each year and forms a component of the revenue requirement through the return on and of capital.

6.2.1 September 2010 Draft Report capital expenditure forecasts

The ACCC approached Telstra during the process of estimating the September 2010 Draft Report prices for its forecasts of future capital expenditure but Telstra advised that suitable forecasts were not available.

In the absence of capital expenditure forecasts provided by Telstra, the ACCC developed its own forecasts of capital expenditure to estimate draft indicative prices for the proposed first regulatory period from 2010-11 to 2013-14. The ACCC assumed that capital expenditure over the regulatory period would be approximately the same as the five-year average of past capital expenditure (in real terms) on assets used to provide the declared fixed line services.

The ACCC considered two sources of data on past capital expenditure: Telstra's RAF accounts and Telstra's annual reports. The ACCC ultimately used data contained in Telstra's annual reports.

The RAF data does not directly report gross capital expenditure. Implied capital expenditure can be estimated as the year-on-year change in the historical value of assets by asset class (that is, the difference between the opening and closing book value of the assets). This method of estimating annual capital expenditure is subject to significant problems. In some years, the method implies that capital expenditure is negative. In addition, implied capital expenditure is highly volatile from year to year. The estimation of implied capital expenditure may be distorted by a number of factors, including:

- asset sales, asset write-downs, transfers of assets to related companies, or other asset disposals during the year

⁸⁹ To ensure depreciation of land assets is effectively zero, land assets have been assigned asset lives of 10,000 years, consistent with the treatment of land assets by other regulators such as the Victorian Essential Services Commission.

- ‘retirements’ of assets that become fully depreciated during the year
- changes in asset lives that alter the written down value of those assets
- changes in accounting practices or valuation approaches
- the potential inclusion of some network land and building assets.

Due to these problems, the ACCC concluded that using RAF data to estimate capital expenditure did not produce sufficiently reliable estimates to use in forecasting capital expenditure.

The ACCC therefore used annual report information to develop its capital expenditure forecasts for the purpose of the September 2010 Draft Report. Several assumptions were required to allocate the reported capital expenditures to the CAN and Core:

- The 2008, 2009 and 2010 annual reports record capital expenditure in a number of categories, including fixed access, network core and transmission.⁹⁰ The ACCC assumed that the capital expenditure reported for fixed access was likely to represent investments in CAN assets while the expenditure reported for network core and transmission would relate to Core assets in the FLSM.
- Prior to 2008, different classifications were used for capital expenditure in Telstra’s annual reports. The ACCC assumed that capital expenditure reported for the customer access network category related to CAN assets while switching and transmission expenditures were allocated to Core assets.
- All of the capital expenditure recorded in the transmission category was allocated to the Core network. This was considered likely to overstate actual capital expenditure on transmission assets included in the Core because some of this expenditure was likely to relate to inter-capital transmission and non-declared regional transmission assets.⁹¹ However, the ACCC did not have disaggregated data to allow it to exclude these expenditures.

In developing its forecasts, the ACCC noted that it had not attempted to forecast the typical volatility seen in actual capital expenditure from year to year. Its capital expenditure forecasts for each year of the regulatory period were smoothed out to reflect the underlying level of investment in CAN and Core assets.

The ACCC proposed to adopt efficiency mechanisms to provide incentives for Telstra to undertake prudent and efficient capital investments. Proposed mechanisms were:

- capital expenditure prudence checks
- monitoring of the use of competitive tender processes
- a carry-forward mechanism to share the benefits of efficiency gains, and
- cost pass-through mechanisms for major unforeseeable and uncontrollable events.

⁹⁰ The other categories of capital expenditure are: IT, land and buildings, products, Sensis, wireless access, international, and other.

⁹¹ Inter-capital transmission is a declared service but not one of the fixed line regulated services in the current review. Inter-capital transmission would not be allocated to the Core network.

6.2.2 Submissions on capital expenditure forecasts

Submissions by access seekers generally stated that the ACCC's capital expenditure forecasts were too high and that capital expenditure was expected to decline over the regulatory period.

ACCC's capital expenditure forecasts

Macquarie agreed with the use of Telstra's annual report data when more reliable data was not available. However, it considered a five-year historical average would overstate capital expenditure over the regulatory period for two main reasons. First, Telstra was unlikely to continue to invest extensively in the copper network due to the NBN and second, capital expenditure on both CAN and Core assets had fallen in the past two years.

Optus submitted that recent capital expenditure by Telstra should not be used as the forecast of future capital expenditure. It proposed assuming continuing annual falls in capital expenditure at the same annual rates as recorded in 2009-10. On this basis, it stated that annual declines of 24 per cent for CAN and 28 per cent for Core capital expenditure over the regulatory period would be conservative because capital expenditure is likely to fall rapidly as Telstra decommissions its fixed network.⁹²

Optus also submitted that the September 2010 Draft Report did not clearly explain how total capital expenditure was allocated between the relevant asset classes. Optus noted that the largest proportion of capital expenditure was allocated to 'ducts and pipes' (40 per cent) and 'copper cables' (17 per cent). Optus considered these allocations to be unrealistic as Telstra is unlikely to undertake significant new investments in these assets, given the impending migration of its fixed line customers to the NBN. It stated that minimal capital expenditure should be allocated to the 'ducts and pipes' and 'copper cables' asset classes.

Frontier Economics submitted that the ACCC's forecast did not appropriately account for the historical downward trend in actual capital expenditure and failed to account for Telstra's expected decommissioning of its copper network as a result of the NBN roll-out. It also stated that the ABS PPI for electronic equipment and other machinery is not an appropriate inflator.

Herbert Geer (on behalf of iiNet, Internode and Adam Internet) questioned the ACCC's use of a five-year historic average to forecast capital expenditure and stated that the ACCC had not sufficiently justified its assumptions.

Telstra submitted that the ACCC's capital expenditure forecasts made no allowance for indirect capital costs, resulting in the revenue requirement being understated by \$168m in 2010-11. It also submitted that the ACCC's capital expenditure forecasts would not be reliable due to the highly uncertain environment.

Efficiency mechanisms for capital expenditure

Telstra submitted that its capital planning process was efficient and prudent and, as such, there was no justification for prudency reviews as proposed in the September

⁹² Optus submission to the ACCC's *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, October 2010, (Optus submission), p. 12. The ACCC notes that the figures in the table on p. 12 are the reverse of the figures in para. 3.25 of Optus' submission. The ACCC has taken the figures in the text as being correct.

2010 Draft Report. It advocated the adoption of the AER's approach to forecasting capital expenditure. Under this approach the regulated business' capital expenditure forecasts must be accepted unless the AER is satisfied that the forecasts do not reflect the efficient and prudently incurred costs of meeting defined network objectives.

Telstra also submitted that it was concerned that the ACCC 'seems to leave open the option to review individual projects.'⁹³ Telstra considered this:

would allow the ACCC to either reject the entire forecast because a small number of projects were considered not to meet the prudence and efficiency test or to adjust the total forecast downwards by excluding those projects.⁹⁴

Optus submitted that specific efficiency mechanisms were not necessary because:

- it was unlikely that significant investment would be required in future
- efficiency concerns could be addressed through expert review, and
- efficiency mechanisms were more likely to create adverse incentives to take advantage of information asymmetries than to address genuine inefficiencies.

Specifically, Optus suggested that Telstra had strong incentives to inflate its capital expenditure forecasts. It proposed that all deviations between forecast and actual expenditures should be returned to end users through lower prices. In contrast, Optus considered that the proposed efficiency mechanisms would inappropriately allow Telstra to retain the full benefit from such deviations.

AAPT supported the use of incentive mechanisms to ensure that only prudently incurred capital expenditure was included. However, it urged the ACCC to consider an alternative pricing approach, whereby a CPI-X cap is applied to individual service prices, thereby providing greater certainty and less susceptibility to gaming.

VHA submitted that it supported most of the efficiency mechanisms proposed by the ACCC for capital expenditure. However, VHA requested greater detail on the proposed application of these mechanisms. For instance, it was not clear whether such mechanisms would be applied periodically throughout the regulatory period or whether such mechanisms would be applied at the end of the relevant regulatory period.

6.2.3 ACCC's revisions to capital expenditure forecasts

In estimating IAD prices, the ACCC revised its capital expenditure forecasts as a result of submissions and further information provided by Telstra in November 2010.

Telstra subsequently provided updated information on its capital expenditure forecasts in March 2011. The updated information was received after the IADs had been made. The ACCC has taken this additional information into account and further revised its capital expenditure forecasts for the purposes of estimating the draft prices included in this discussion paper.

Revisions adopted in estimating prices for the IADs

In November 2010, the ACCC requested additional information from Telstra on:

- the alternative capital expenditure forecasts that it considered would be more appropriate than the forecasts included in the September 2010 Draft Report

⁹³ Telstra submission, p. 96.

⁹⁴ *ibid.*

- its own internal capital expenditure forecasts and an explanation of the basis for these forecasts, such as the drivers of its forecast capital expenditures, other factors taken into account, and, if possible, separate identification of ‘baseline’ projects and ‘discretionary’ projects
- any forecast impacts from the roll-out of the NBN and an explanation of how these impacts were estimated.⁹⁵

On 22 November 2010, Telstra provided its 2009–10 actual capital expenditure and forecast 2010–11 capital expenditure on assets used to provide the declared fixed line services.⁹⁶

These capital expenditure figures were substantially lower than the capital expenditure amounts obtained from Telstra’s annual reports. The annual report amounts included capital expenditures on assets that are not used to provide the declared fixed line services. Telstra’s response to the ACCC’s information request provided capital expenditures for only those asset classes that it considered should be included in the RAB (see chapter 5). Where Telstra identified only some of the assets included in an asset class as being used to provide the declared fixed line services, it included an equivalent share of the capital expenditure forecast on that asset class⁹⁷ in the capital expenditure figures.

The ACCC considers that the capital expenditure figures provided by Telstra are likely to be a more accurate measure of capital expenditure on the assets used to provide the declared fixed line services than Telstra’s annual report figures.

Telstra’s forecast 2010-11 capital expenditure is lower than its capital expenditure in 2009-10. Telstra stated that its forecasts are based on a ‘minimum maintenance capex’ where capital expenditure is only undertaken to maintain existing service levels or respond to organic network growth.⁹⁸

In estimating prices for the IADs, the ACCC adopted Telstra’s 2009-10 actual capital expenditure and its 2010-11 forecast capital expenditure. Since Telstra did not provide a forecast for capital expenditure in 2011-12, the ACCC assumed that capital expenditure would remain at the same level as forecast for 2010-11 in real terms.

To convert Telstra’s capital expenditure forecasts to the base year dollars used in the FLSM, the forecasts were indexed to 1 July 2009 dollars using a simple average of the ABS labour price index for private information media and telecommunications and ABS PPI for communication equipment manufacturing for 2009-10 and 2010-11. The rationale for using these indexes is discussed in section 7.3.2 of this discussion paper.

The ACCC also forecast capital expenditure for an additional asset class ‘indirect capital assets’ included in the RAB (see chapter 5). The only information available on capital expenditure on ‘indirect capital assets’ is derived indirectly from the RAF,

⁹⁵ ACCC, *ACCC Letter to Telstra – Request for further information re fixed line pricing*, 10 November 2011, available at <http://www.accc.gov.au/content/index.phtml?itemId=951049>.

⁹⁶ November 2010 Telstra submission. A redacted version of the information submission is available at www.accc.gov.au/content/index.phtml?itemId=953633

⁹⁷ There are four such partly included asset categories, and the percentage excluded is as follows:

[REDACTED]

⁹⁸ Telstra Corporation Limited, *Pricing Principles for Fixed Line Services – Response to the ACCC’s request for further information*, November 2010, p. 19.

using year-on-year changes in the historical asset value. As noted in section 6.2.1 above, this method of estimating annual capital expenditure is subject to significant problems. In the absence of an alternative source of information, the ACCC has assumed that annual capital expenditure on these assets is equal to annual depreciation on these assets as estimated by the FLSM, using the ACCC’s estimate of the average asset life of these assets.

Table 6.1 shows the forecasts for CAN and Core capital expenditure in 2010-11 and 2011-12 used to estimate IAD prices, and base year expenditure in 2009-10 for comparison.

Table 6.1: 2009-10 capital expenditure^a and 2010-11 to 2011-12 forecast capital expenditure (in 1 July 2009 dollars)—used to estimate IAD prices

	2009-10	2010-11	2011-12
CAN	██████████	██████████	██████████
Core	██████████	██████████	██████████
Total	██████████	██████████	██████████

Note: ^a Includes estimated capital expenditure for the ‘indirect capital assets’ asset class, assuming that annual capital expenditure on these assets is equal to annual depreciation on these assets.

Revisions adopted in estimating draft FAD prices

On 2 March 2011, Telstra submitted revised capital expenditure forecasts. As noted above, the updated forecasts were received after the IADs had been made.

Telstra revised its 2010-11 capital expenditure forecast upwards by ██████████ ██████████ to reflect actual capital expenditure in the first six months of 2010-11.⁹⁹ Telstra advised that it is currently updating its capital expenditure forecasts for future years but stated that for the purpose of forecasting capital expenditure over the regulatory period, the ACCC could adopt a nominal ██████████ annual increase from its revised 2010-11 expenditure forecast.

Telstra has previously submitted that its capital projects are divided into two categories: ‘baseline’ projects that are necessary to maintain minimum network standards, comply with legislative requirements and cater for current or forecast customer demand; and discretionary projects which are all other capital projects.¹⁰⁰ It advised that non-discretionary projects comprise approximately ██████████ of all capital projects.

The ACCC considers that Telstra’s forecast of a small real decline in capital expenditure over the regulatory period is reasonable. The ACCC expects that Telstra’s investments are likely to focus on ‘baseline’ projects needed to maintain its current network and cater for population growth and that Telstra is unlikely to undertake significant discretionary investments in the fixed line network, due to the roll-out of the NBN. Consequently, the ACCC has adopted Telstra’s updated capital expenditure forecasts to estimate draft FAD prices.

⁹⁹ Telstra, *Pricing Principles for Fixed Line Services – Response to the ACCC’s request for further information – updated capital expenditure information*, 2 March 2011.

¹⁰⁰ Telstra submission, p. 96.

Telstra’s updated forecasts did not include capital expenditure on ‘indirect capital assets’. In the absence of additional information relating to ‘indirect capital assets’, the ACCC has maintained its previous assumption that annual investments in these assets will equal their estimated depreciation allowances. In estimating draft prices, the ACCC has corrected an error in the previous calculation of capital expenditure on ‘indirect capital assets’, which understated forecast capital expenditure.

Forecast capital expenditure for 2010-11 has increased from [REDACTED] [REDACTED]. From 2011-12, the ACCC has applied a [REDACTED] nominal growth rate, which translates into a real decline, to forecast capital expenditure on assets other than ‘indirect capital assets’, for the rest of the period. Table 6.2 shows the forecasts used to estimate draft prices.

Table 6.2: 2009-10 capital expenditure^a and 2010-11 to 2015-16 forecast capital expenditure (\$m at 1 July 2009)—used to estimate draft prices for 2011-12 to 2015-16

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
CAN	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Core	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Note: ^a Includes estimated capital expenditure for the ‘indirect capital assets’ asset class, assuming that annual capital expenditure on these assets is equal to annual depreciation on these assets.

6.2.4 Allocation of forecast capital expenditure to asset classes

In the September 2010 Draft Report, the ACCC allocated forecast capital expenditure asset classes by taking into account asset size, remaining asset life and expected demand for the services using the asset (which could result in a need to expand capacity). However, it was cautious in allocating forecast capital expenditure on the basis of remaining asset lives, noting the qualifications on the process used to estimate total and remaining asset lives for the September 2010 Draft Report.

On 22 November 2010 in a response to a request by the ACCC, Telstra provided actual and forecast capital expenditure by asset category. These asset categories are a more disaggregated classification of assets than the asset classes listed in the RAF and used in the FLSM. The ACCC reconciled these asset categories against the asset classes in the FLSM and used Telstra’s allocations.

However, for ‘other communications plant and equipment’, ‘network land’ and ‘network buildings/support assets’, total capital expenditure allocated to these assets must, for the purposes of the FLSM, be further allocated to the CAN and Core since these asset classes are included in both the CAN and Core assets. The ‘indirect capital assets’ asset class also falls within both the CAN and the Core. Forecast capital expenditure for these assets has been allocated to the corresponding CAN and Core asset classes based on the share of that asset’s total depreciated value in the CAN and in the Core respectively.

This method has been applied to allocate forecast capital expenditure to asset classes for the purpose of estimating IAD prices. The resulting allocations are shown in

tables 6.3 and 6.4. The same method has been applied for the purpose of estimating draft prices and the resulting allocations are shown in tables 6.5 and 6.6.

Table 6.3: Allocation of capital expenditure by CAN asset class (\$m at 1 July 2009) —used to estimate IAD prices [c-i-c]

CAN	2009-10	2010-11	2011-12
Ducts and pipes			
Copper cables			
Other cables			
Pair gain systems			
Radio bearer equipment			
Other CAN assets			
Other communications plant and equipment			
Network land			
Network buildings/support			
Indirect capital assets			

Table 6.4: Allocation of capital expenditure by Core asset class (\$m at 1 July 2009) —used to estimate IAD prices [c-i-c]

Core	2009-10	2010-11	2011-12
Switching equipment - Local			
Switching equipment - Trunk			
Switching equipment - Other			
Inter-exchange cables			
Transmission equipment			
Radio bearer equipment			
Other communications plant and equipment			
Network land			
Network buildings/support			
Indirect capital assets			
LSS equipment	-	-	-

Table 6.5: Allocation of capital expenditure by CAN asset class (\$m at 1 July 2009) —used to estimate draft FAD prices [c-i-c]

CAN	2011-12	2012-13	2013-14	2014-15	2015-16
Ducts and pipes	■	■	■	■	■
Copper cables	■	■	■	■	■
Other cables	■	■	■	■	■
Pair gain systems	■	■	■	■	■
Radio bearer equipment	■	■	■	■	■
Other CAN assets	■	■	■	■	■
Other communications plant and equipment	■	■	■	■	■
Network land	■	■	■	■	■
Network buildings/support	■	■	■	■	■
Indirect capital assets	■	■	■	■	■

Table 6.6: Allocation of capital expenditure by Core asset class (\$m at 1 July 2009)—used to estimate draft FAD prices [c-i-c]

Core	2011-12	2012-13	2013-14	2014-15	2015-16
Switching equipment - Local	■	■	■	■	■
Switching equipment - Trunk	■	■	■	■	■
Switching equipment - Other	■	■	■	■	■
Inter-exchange cables	■	■	■	■	■
Transmission equipment	■	■	■	■	■
Radio bearer equipment	■	■	■	■	■
Other communications plant and equipment	■	■	■	■	■
Network land	■	■	■	■	■
Network buildings/support	■	■	■	■	■
Indirect capital assets	■	■	■	■	■
LSS equipment	-	-	-	-	-

Telstra did not provide an explanation of how it had allocated forecast total capital expenditure to asset classes. The ACCC considered whether Telstra's allocations appear appropriate. Where the forecast capital expenditure allocated to an asset class differs significantly to the past pattern of investment in that asset class, the ACCC considered whether reasons existed that could explain the difference.

Telstra's investment in ducts and pipes has declined over the past ten years. Forecast investment from 2010-11 to 2015-16 appears consistent with Telstra's stated 'minimum maintenance capex' approach. Forecast investment in copper cables has also fallen and appears consistent with this approach.

Investment in local switching equipment has been falling over time and is forecast to fall further in 2010-11. The ACCC understands that Telstra is no longer investing in circuit switches as these switches cannot be used with fibre. As existing circuit switches reach the end of their useful lives, Telstra either repairs them or replaces them with surplus circuit switches transferred from elsewhere in the network. Where necessary, Telstra invests in digital switches (or 'soft' switches) where it is currently

using fibre. The ACCC considers that, during the transition to the NBN, it is likely that Telstra will make minimal investments in local switching equipment.

In its November 2010 response to the ACCC's information request, Telstra did not include any capital expenditure in the costs allocated to the LSS.

6.2.5 Efficiency mechanisms

The ACCC maintains its view that efficiency incentives will promote efficient capital expenditure by Telstra.

The ACCC proposes to adopt an efficiency benefit sharing scheme, similar to the schemes used by the AER in regulating electricity distribution and transmission providers. These schemes provide that any under-expenditure during the regulatory period is not recouped through price reductions in the next regulatory period (or refunds on prices paid during the period), and no compensation can be claimed for any over-expenditure during the period. That is, no adjustments will be made for 'unders or overs' in actual expenditure, compared to forecast expenditure, during the regulatory period.

Where the under-expenditure reflects efficiency improvements by Telstra, it will have an incentive to improve its efficiency because it retains the capital expenditure savings until the end of the regulatory period. Likewise, it will bear the cost of higher than forecast expenditure caused by inefficiencies (through lower profits).

In the next regulatory period, efficiency improvements during previous regulatory periods would be taken into account in determining an efficient level of forecast capital expenditure for the period. In this way, the benefits from efficiency improvements would be shared with access seekers and end-users.

For an efficiency benefit sharing scheme of this nature to work effectively, it is important that the capital expenditure forecasts used in the FLSM represent an efficient level of expenditure. The ACCC considers that sufficient transparency in the information supporting the forecasts and careful scrutiny during the consultation process for the price reset will maximise the likelihood that the forecasts will not include significant inefficiencies or inflated costs.

While the ACCC recognises that Telstra has incentives to overstate its required expenditures, it considers this will be mitigated by requiring it to:

- provide a detailed explanation of the information, assumptions and cost drivers used to develop its forecasts for the coming regulatory period—and subjecting this explanation to scrutiny during the consultation process for the price reset, and
- explain any significant differences between its forecasts for the previous regulatory period and its actual capital expenditure over the period.

In future price resets, to assess the prudence and efficiency of Telstra's capital expenditure forecasts, the ACCC will analyse, and consult publicly on (while appropriately protecting Telstra's commercial-in-confidence information), the supporting information provided by Telstra on its forecast 'baseline' and discretionary projects. This supporting information should include:

- a copy of Telstra's internal investment guidelines used to rank capital expenditure projects

- an explanation of the assumptions used to determine total capital expenditure including:
 - how the ‘baseline’ capital expenditure forecasts relate to the drivers of investment, such as population growth and replacement of assets nearing the end of their asset lives
 - for discretionary projects, a broad description of the type of investments being undertaken and the drivers of those investments.

In submitting capital expenditure forecasts for each regulatory period, the ACCC proposes that Telstra should provide:

- a report comparing the forecast for the previous regulatory period with actual capital expenditure, and
- an explanation for any differences.

The ACCC does not intend to review projects on an individual basis. Given the large number of relatively small investment projects, the ACCC considers that reviewing individual projects would not be feasible.

6.3 Weighted Average Cost of Capital (WACC)

A firm’s WACC is the risk-adjusted rate of return on capital required by debt and equity capital providers to the firm. It reflects the return investors could expect to earn by investing in the next best investment with equivalent risk; that is, it represents the firm’s opportunity cost of capital. The WACC is multiplied by the regulatory asset base to calculate the firm’s return on capital.

The ACCC has used a real vanilla WACC in the FLSM to calculate the return on capital. The vanilla WACC is calculated as follows:

$$WACC_{vanilla} = \frac{D}{V} \times E[Kd] + \frac{E}{V} \times E[Ke]$$

where D = the value of debt

E = the market value of equity

V = the market value of equity and debt

$E[Kd]$ = the required/expected return on debt

$E[Ke]$ = the required/expected return on equity

The vanilla WACC is a post-tax WACC. The cash flows that are applied to the vanilla WACC are post-tax cash flows and they include the benefits from imputation as well as the interest tax shield.

6.3.1 WACC estimates: September 2010 and March 2011

In the September 2010 Draft Report, the ACCC used a real vanilla WACC of 6.39 per cent (which equates to a nominal vanilla WACC of 9.14 per cent) to estimate draft indicative prices. For the purpose of making IADs in March 2011, the ACCC’s real vanilla WACC estimate was 6.25 per cent, which equates to a nominal vanilla WACC of 9.04 per cent.

In updating its WACC estimate, the ACCC took into account submissions on the WACC and more up-to-date information on the WACC parameters. The parameter

values used to estimate the WACC for the September 2010 Draft Report, and the updated parameter values in March 2011, are set out in table 6.7.

Table 6.7 Estimates of the vanilla WACC and WACC parameters in the September 2010 Draft Report and for draft FAD prices

WACC parameter	September 2010 Estimates	Draft FAD prices
Nominal risk-free rate	5.36%	5.61%
Expected inflation	2.59%	2.63%
Real risk-free rate	2.70%	2.91%
Nominal debt risk premium	3.07%	2.19%
Debt issuance cost	0.085%	0.083%
Nominal market risk premium	6%	6%
Equity beta	0.7	0.7
Debt gearing	40%	40%
Gamma	0.65	0.45
Debt beta	0%	0%
Equity issuance costs	0%	0%
<i>Nominal Vanilla WACC</i>	<i>9.14%</i>	<i>9.04%</i>
<i>Real Vanilla WACC</i>	<i>6.39%</i>	<i>6.25%</i>

On 22 September 2010, Telstra wrote to the ACCC requesting further information on the ACCC's calculation and analysis of several WACC parameters: the risk-free rate; the DRP; the gamma; debt issuance costs; Telstra's average dividend payout ratio; and Telstra's distribution of franking credits.¹⁰¹ The ACCC provided the requested information on 7 October 2010.¹⁰²

General submissions on the WACC

Telstra proposed that a nominal pre-tax WACC should be used for 'administrative simplicity'.¹⁰³ It also submitted that the risk-free rate and the DRP should be updated annually.

AAPT submitted that Telstra's sunk assets used to provide fixed line services have already been fully depreciated, and that the WACC proposed in the September 2010 Draft Report is too high. Optus also submitted that the WACC used in the September 2010 Draft Report is too high.

Macquarie Telecom supported the derivation of the WACC in the September 2010 Draft Report.

VHA supported the approach for determining the WACC adopted in the September 2010 Draft Report. However, it submitted that the risk faced by the whole of Telstra should be considered when setting the WACC, not just the risk faced by Telstra from

¹⁰¹ Telstra Corporation Limited, *Fixed Line Pricing Principles review – Request for ACCC's analysis* (Letter from Telstra to Mr John Skinner), 22 September 2010.

¹⁰² ACCC, *Fixed Line Pricing Principles review – Telstra Request for ACCC's analysis* (Letter from Mr Robert Wright to Telstra), 7 October 2010. This letter is available on the ACCC's website at <http://www.accc.gov.au/content/index.phtml/itemId/951049>.

¹⁰³ Telstra Corporation Limited, *Pricing Principles for Fixed Line Services – Response to the ACCC's Draft Report: Schedule 5*, p. 4.

its regulated activities. VHA considered that a WACC focusing only on Telstra's regulated activities could deliver a lower expected rate of return than Telstra could earn from investing in unregulated activities, which could mean the LTIE objective of efficient investment in infrastructure is not achieved. It noted that WACC parameters such as gamma and the effective tax rate may differ considerably between firms. Hence, VHA submitted that it is important to estimate them robustly.

ACCC proposed view

The ACCC maintains its view that a real vanilla WACC is consistent with the FLSM and will provide an appropriate risk-adjusted rate of return to Telstra.

The methodology and data used to derive the parameter estimates in the September 2010 Draft Report, the submissions on those parameters, and the ACCC's updated parameter estimates are discussed below.

6.3.2 Cost of equity

The cost of equity is a direct input into the WACC formula and needs to be estimated to derive the overall cost of capital for the regulated firm. The cost of equity reflects the opportunity cost of not investing in another investment of equivalent risk.

The cost of equity can be estimated according to the capital asset pricing model (CAPM). The CAPM specifies a relationship between the expected return on an individual risky asset or business and the level of systematic (or non-diversifiable) risk.¹⁰⁴ The formula is:

$$E[Ke] = rf + \beta_e \times (E[Rm] - rf)$$

where $E[Ke]$ = the required/expected return on equity

rf = the risk-free rate

β_e = the firm's equity beta

$E[Rm]$ = the required/expected return on the market portfolio

Risk-free rate

The risk-free rate refers to the return an investor gets from holding an asset with a promised repayment amount and no risk of default. As no risk-free assets are directly observable, an appropriate proxy, and the sampling period over which the proxy is measured, must be determined.

Typically, Australian Commonwealth Government bonds are used as a proxy for the risk-free asset. In the basic form of the CAPM, investors' planning horizons typically would match the life of the asset. This implies that long term investments should be matched with long term government bonds.¹⁰⁵ Most fixed network assets, such as ducts and pipes, are long-lived and it is appropriate to use a long-term rate such as 10 years for these assets.

¹⁰⁴ Systematic risk refers to risk that is inherent in the asset that cannot be diversified away. Systematic risk includes market wide factors which affect all companies: for example, changes in interest rates and inflation. Hence, systematic risks faced by investors are those risks that are common to the market as a whole.

¹⁰⁵ S Bishop and B Officer, *Term of risk free rate*, Prepared for Energy Networks Association, Australian Pipeline Industry Association and Grid Australia, September 2008, p. 13.

Following the Tribunal's decision in relation to GasNet's access arrangements,¹⁰⁶ the ACCC has generally used 10 year CGS bonds to determine the risk-free rate. The Tribunal's view was reiterated in a ULLS undertaking decision:

[404] *Gasnet* has suggested that a 10 year rate is appropriate where the life of the assets and the length of the investment is long. The Tribunal considers that this is the case here, given the nature of the CAN assets and the investment in those assets.

...

[408] The Tribunal sees no present reason not to follow the decision in *Gasnet*. The Tribunal is therefore not persuaded to depart from the approach of the ACCC and Telstra to use government bonds with a 10 year maturity as an appropriate proxy for the risk-free rate.¹⁰⁷

The ACCC considers regulated firms should use an averaging period when estimating the risk-free rate to reduce the impact of day-to-day market volatility.

September 2010 Draft Report risk-free rate

In the September 2010 Draft Report, the ACCC considered that using the 10 year Australian Commonwealth Government bond yield to maturity and a 10 day averaging period, as in previous decisions such as the ULLS undertaking,¹⁰⁸ would promote consistency and certainty in moving to a BBM approach. The ACCC considered that the risk-free rate should be set for the duration of the regulatory period.

In the FLSM, the ACCC uses a real risk-free rate, which is calculated by deflating the nominal risk-free rate by expected inflation. The Fisher equation is used to obtain the real risk-free rate from the nominal risk-free rate:

$$\frac{1+i}{1+\pi} = 1+r$$

where i = nominal interest rate

π = expected inflation

r = real interest rate

For the purposes of calculating the nominal risk-free rate for the September 2010 Draft Report, the ACCC used a 10 day averaging period from 2 June 2010 to 15 June 2010. The average 10 year yield to maturity of 10 year Australian Commonwealth Government bonds for this period was 5.36 per cent.¹⁰⁹

The ACCC and AER have previously determined that the best estimate of inflation over a 10 year period is to use the RBA's short term inflation forecasts, and then adopt the mid-point of its target inflation band (which is 2.5 per cent) for the remaining years.¹¹⁰

¹⁰⁶ *Application by GasNet Australia (Operation) Pty Ltd* [2003] ACompT 6.

¹⁰⁷ *Application by Telstra Corporation Limited* [2010] ACompT 1 at [404], [408].

¹⁰⁸ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 204.

¹⁰⁹ Bloomberg, sourced on 16 June 2010.

¹¹⁰ See: AER, *Final decision: SP Ausnet Transmission Determination 2008–2009 to 2013–14*, 2008; AER, *Final decision: Victorian electricity distribution network service providers – Distribution*

The RBA's inflation forecast over the year to June was used for consistency with the averaging period and bond duration. A geometric average of the forecast inflation rates was used to adjust for compounding inflation between years. At the time of the September 2010 Draft Report, the RBA's inflation forecasts extended out to two years and stood at 3 per cent for both years to the June 2011 and June 2012 quarters.¹¹¹ The geometric average of the inflation forecasts from June 2010 to June 2019 was 2.59 per cent.

The real-risk free rate used in the September 2010 Draft Report, after adjusting the nominal risk-free rate for expected inflation, was 2.70 per cent.

The average inflation rate was also applied to the real prices estimated by the FLSM to obtain nominal prices.

Submissions on the risk-free rate

Telstra supported the ACCC's approach of using the 10-year government bond rate as a proxy for the risk-free rate. However, it submitted that the 10 day averaging period used to determine the risk-free rate may be insufficient to mitigate the daily volatility exhibited by government bond markets, and instead proposed a 20-trading day trailing average. Telstra noted that telecommunications regulators in the UK and New Zealand have placed greater weight on longer-term averaging periods as a response to the market uncertainty arising from the global financial crisis. Telstra also noted that the AER uses a 10–40 day averaging period.

Telstra further submitted that the point in time of the averaging period may affect parameter values, particularly during periods of market uncertainty. It noted that businesses regulated by the AER have flexibility in nominating when the averaging period occurs.

ACCC proposed view on the risk-free rate

The ACCC considers that its method for calculating the risk-free rate in the September 2010 Draft Report continues to be appropriate. Accordingly, the ACCC adopted this methodology in calculating the risk-free rate used in estimating IAD prices.

However, the ACCC has reconsidered the appropriate length of the averaging period. While a longer averaging period may reduce the impact of day-to-day volatility in the market on the estimated risk-free rate, increasing the length of the averaging period also increases the presence of dated information in the estimate. In determining the appropriate length of the averaging period for the risk-free rate, a trade-off is needed between these two factors.

For the purpose of estimating prices for the IADs, the ACCC decided to adopt a 20 day averaging period that was as close as possible to the commencement of the relevant regulatory period. Since the IAD prices have been backdated to apply from 1 January 2011, the ACCC used a 20 day period from 6 December 2010 to 31 December 2010. The ACCC has used the same averaging period for calculating draft FAD prices for the purpose of this discussion paper. However, it intends to update the risk-free rate and other WACC parameters in calculating final FAD prices.

determination 2011-2015, 2010, p. 515 and ACCC, *Australian Rail Track Corporation Limited: Hunter Valley Coal Network Access Undertaking – Draft Decision*, March 2010, p. 539.

¹¹¹ RBA, *Statement on monetary policy*, 6 May 2010, p.56.

The average ten year yield to maturity of 10 year Australian Commonwealth Government bonds for the period from 6 December 2010 to 31 December 2010 was 5.61 per cent, which is the value of the nominal risk-free rate that was used in calculating the IAD prices and draft FAD prices.

The ACCC considers that its methodology for calculating expected inflation in the September 2010 Draft Report continues to be appropriate. The ACCC has updated its inflation estimate to take into account the latest RBA inflation forecasts.¹¹² Since the September 2010 Draft Report, the RBA has released its inflation forecast for 2012–13 and this figure has been used instead of the midpoint of the RBA’s inflation target.¹¹³ The RBA has also revised down its inflation forecasts for 2010–11 and 2011–12.

In addition, the ACCC has identified and corrected a calculation error in the September 2010 Draft Report. Instead of using the RBA’s CPI forecasts for 2010–11 and 2011–12, the values used were an average of the RBA’s CPI forecast and the RBA’s underlying inflation forecast for each of those financial years.

The updated inflation estimate is the geometric mean of the ten years to June 2019 of the following figures:

- actual CPI published by the Australian Bureau of Statistics (ABS) for the 2010 financial year (3.10 per cent)
- the RBA’s CPI inflation forecasts for the 2011, 2012 and 2013 financial years (2.5 per cent, 2.75 per cent and 3 per cent, respectively) and
- the midpoint of the RBA’s inflation target—2.5 per cent—for the following six years.

This gives an inflation estimate of 2.63 per cent, up slightly from the 2.59 per cent inflation estimate used in the September 2010 Draft Report.

In estimating prices for the IADs, the ACCC used a real risk-free rate, after deducting expected inflation from the nominal risk-free rate, of 2.91 per cent. It proposes to use the same methodology, with updated inputs, in estimating prices for the FADs.

Market risk premium (MRP)

The MRP is the expected risk premium investors require over the risk-free return to be willing to invest in a well diversified risky ‘market’ portfolio. The MRP is normally quoted as an annual figure and the ACCC has adopted that convention. The MRP is not directly observable as it is an expected premium.

September 2010 Draft Report MRP

In determining the MRP for the September 2010 Draft Report, the ACCC had regard to historical estimates, current studies of Australian market practitioners and regulatory precedent.

Historical MRPs estimated over a long period of time are frequently used as the best estimate of what the MRP is likely to be in the future. Long term historical estimates

¹¹² The RBA’s forecasts were updated to take into account the September and December quarter CPI figures published by the ABS.

¹¹³ RBA, *Statement on monetary policy*, 3 February 2011, p. 60.

available at the time of the September 2010 Draft Report supported an MRP of six per cent.¹¹⁴

Surveys of Australian financial market practitioners also supported an MRP of six per cent.¹¹⁵ Studies of Australian financial market practitioners involved in capital budgeting show they most commonly used six per cent per annum as an MRP for asset or investment valuations.¹¹⁶ In addition, survey data found an MRP of six per cent was the most commonly adopted value by market practitioners prior to the global financial crisis.¹¹⁷

While the ACCC supported a conservative value of 6.5 per cent for the MRP in its 2008 ULLS undertaking decision to reflect extreme uncertainty in capital markets at the time associated with the global financial crisis, the ACCC noted in the September 2010 Draft Report that the Australian economy had shown signs of recovery and that Australian market conditions appeared to be returning to normal. This was consistent with recent ACCC decisions such as the Australian Postal Corporation 2010 Price Notification which concluded that the MRP estimate should be the historical value of six per cent.¹¹⁸

While the AER has applied a value of 6.5 per cent, it has noted that ‘commentary on financial markets indicates clear signs of stabilisation since the time of the AER’s Statement of Regulatory Intent and its decision to increase the MRP to 6.5 per cent’ and ‘the AER considers that a MRP of 6.5 per cent may be considered conservative when accounting for current prevailing conditions’.¹¹⁹

The ACCC concluded that the appropriate value for the MRP was six per cent.

Submissions on the MRP

Telstra opposed the ACCC’s proposed MRP of six per cent, arguing that financial market conditions have not returned to pre-global financial crisis levels. It considered that the MRP should remain at the 6.5 per cent level applied in the 2008 ULLS Undertaking.

Optus submitted that an MRP of six per cent is appropriate, noting that it is consistent with several of the ACCC’s previous regulatory decisions.

¹¹⁴ JC Handley, *Further comments on the historical equity risk premium—Report prepared for the AER*, 14 April 2009, p. 9. J.C. Handley prepared a report to the AER on the historical equity risk premium for the AER’s review of the WACC parameter. The report used estimates for the periods 1883-2008, 1937-2008, and 1958-2008, ‘grossed-up’ for a 0.5 value of imputation credits, and found an MRP range of 5.6 to 6.1 per cent.

¹¹⁵ AER, *Electricity transmission and distribution network service providers – Review of the weighted average cost of capital (WACC) parameters – Final decision*, May 2009, p. xib.

¹¹⁶ G Troung, G Partington, and M Peat, ‘Cost of Capital Estimation and Capital Budgeting Practice in Australia’, *Australian Journal of Management*, Vol. 33, No. 1, June 2008, p. 155.

¹¹⁷ KPMG, *Cost of capital – market practice in relation to imputation credits*, August 2005, p. 15. Capital Research (Neville Hathaway), *Telstra’s WACCs for Network ULLS and the ULLS and SSS Businesses*, 2006.

¹¹⁸ ACCC, *Draft Decision: Australian Rail Track Corporation Limited – Hunter Valley Coal Network Access Undertaking*, 2010, p. 568. ACCC, *Australian Postal Corporation 2010 Price Notification*, 2010, p. 80.

¹¹⁹ AER, *Draft decision: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, 2010, p. 503.

ACCC proposed view on the MRP

The ACCC maintains its view that an MRP of six per cent is appropriate. The reasons for the ACCC's view are set out below.

In the AER's *Electricity transmission and distribution network service providers – Review of the weighted average cost of capital (WACC) parameters – Final Decision* the AER stated that, under normal economic conditions:

an estimate of 6 per cent was the best estimate of a forward looking long term MRP, and accordingly, under relatively stable market conditions...this would remain the AER's view as to the best estimate of the forward looking long term MRP.¹²⁰

The ACCC considers that economic conditions have now returned to normal following the global financial crisis. It has based this view on expert analysis by the International Monetary Fund (IMF), the RBA and the Organisation for Economic Co-operation and Development (OECD).

In May 2010, the IMF released a paper on the *Potential Growth of Australia and New Zealand in the Aftermath of the Global Crisis*, which observed that Australia was largely unaffected by the global financial crisis:

For Australia, investment barely fell in 2009, and average investment growth is expected to be slightly stronger over the medium term ... The global downturn had a fairly small impact on the Australian economy...¹²¹

In December 2010, the IMF's report on the Australian economic outlook reiterated that economic and capital market conditions are returning to their pre-crisis robust state and that 'Australia has weathered the global financial crisis far better than many other developed economies'.¹²²

The OECD's prognosis of Australian economic conditions in 2010 corroborated the IMF's assessment of Australian economic activity:

After weathering the crisis well in 2009, the Australian economy is projected to experience strong growth in 2010 and 2011, above its trend rate.¹²³

The RBA's views on the prevailing and future market conditions are broadly consistent with those of the IMF and the OECD. In the RBA's view, Australian capital markets appear to have stabilised, improved and become increasingly liquid over recent months.¹²⁴ The RBA indicated in November 2010 that '[t]he turmoil in financial markets ... has abated'.¹²⁵

In December 2009, the RBA noted that the Australian economy displayed unexpected resilience in response to the global financial crisis. Indeed, the Australian economy exhibited positive, albeit muted, growth during the 2009 financial year. The RBA stated that:

¹²⁰ AER, *Electricity transmission and distribution network service providers - Review of the weighted average cost of capital (WACC) parameters – Final Decision*, May 2009, p. 238.

¹²¹ Yan Sun, 'Potential Growth of Australia and New Zealand in the Aftermath of the Global Crisis', IMF Working Paper, WP/10/27, May 2010, pp. 9–10; p. 19.

¹²² IMF, *Mining Boom Bodes Bright Future for Australia*, IMF, 28 October 2010, viewed 3 December 2010, www.imf.org/external/pubs/ft/survey/so/2010/car102810a.htm

¹²³ OECD, *Australia – Economic Outlook 87 Country Summary*, OECD, 2010, viewed 10 November 2010, www.oecd.org/document/15/0,3343,en_2649_34573_45268687_1_1_1_1,00.html

¹²⁴ RBA, *Statement on monetary policy*, 5 August 2010, pp. 39–40.

¹²⁵ RBA, *Statement by Glenn Stevens, Governor: Monetary Policy Decision*, 2 November 2010, at www.rba.gov.au/media-releases/2010/mr-10-26.html.

The Australian economy in 2009 has held up much better than had been expected earlier in the year. Australia is the only developed economy where year-ended growth in GDP has remained positive during the past year.¹²⁶

Australian stock prices have resurged from their low in early 2009. Corporate bond spreads have narrowed considerably since the global financial crisis and, indeed, have returned to April 2008 or pre-crisis levels.¹²⁷

The most recent survey on the MRP, by Fernandez and del Campo in May 2010, suggests that the forward-looking MRP is no greater than six per cent.¹²⁸ The average MRP used by surveyed analysts in Australia is 5.4 per cent, the median value is 5.5 and the maximum value is 6 per cent.¹²⁹

Fernandez and del Campo also surveyed Professors of Finance in Australia in 2010. The average estimate of the MRP was 6.1 per cent, while the median estimate was six per cent.¹³⁰

In estimating prices for the IADs and draft prices for the FADs, the ACCC has adopted the long-term historical average of six per cent for the MRP. It proposes to adopt an MRP of six per cent in estimating FAD prices.

Equity beta

The equity beta represents a measure of the systematic risk of an equity investment in a company relative to an equity investment in the equity market as a whole. The equity beta includes both the fundamental systematic business risk of the firm and any financial risk due to leverage.

The equity beta is measured by estimating the covariance between the return on the relevant assets or investments with the return of a portfolio representative of the market. The equity beta of the market portfolio is standardised at an average of one. Where the equity beta equals one, it indicates that the return on the investments has the same sensitivity to systematic risk as the overall market. If the equity beta is less than one, then the sensitivity of the asset to systematic risk is less than the overall market. Conversely, where the value is greater than one, the systematic risk of the asset is greater than the market and investors would expect a higher return for bearing greater risk.

Regulators adopt a value for the equity beta that is expected to best represent the systematic risk profile of an efficient business. This provides the regulated business with the necessary incentives to undertake only those capital investments that are expected to earn a reasonable return.

Regulators normally determine the equity beta by basing it on the historical equity betas of a selection of businesses deemed to be close comparators to the regulated business. The ACCC noted in the September 2010 Draft Report that it considered

¹²⁶ Ric Battellino, *Housing and the Economy*, Remarks to the 6th National Housing Conference Melbourne Convention and Exhibition Centre, 25 November 2009, in RBA Bulletin December 2009, Reserve Bank of Australia, at www.rba.gov.au/speeches/2009/sp-dg-251109.html

¹²⁷ Tony McDonald, *The Economic Outlook & the Global Financial Crisis*, Address to the 2009 Tasmanian Economic Forum, The Treasury, 4 December 2009, Chart 4, at www.treasury.gov.au/contentitem.asp?NavId=&ContentID=1683

¹²⁸ Pablo Fernandez and Javier del Campo, 'Market Risk Premium used in 2010 by Analysts and Companies: a survey with 2,400 answers', *IESE Business School*, 21 May 2010, pp. 1–15.

¹²⁹ *ibid.*, p. 4.

¹³⁰ *ibid.*, p. 8.

benchmarking with comparable firms was an appropriate method of estimating the equity beta.¹³¹

September 2010 Draft Report equity beta

To derive benchmark estimates of the equity beta, the ACCC used telecommunications firms from selected advanced countries in the OECD as comparable businesses. A number of advanced countries were excluded from the comparison for reasons including: not being publicly listed; not providing fixed line services; and insufficient data.¹³²

In response to the Tribunal's view in the 2008 ULLS Undertaking decision, the ACCC considered monthly and weekly benchmarking data to determine which frequency provides the most robust and reliable estimate of the equity beta.¹³³ Daily estimates of the equity beta were not calculated because a 2008 Ovum study found that daily data are less reliable.¹³⁴

The ACCC also considered whether to use 18 months or two years of data instead of five-years. It concluded that a longer time period would be more reliable and appropriate for estimating an equity beta used as a basis for setting regulated returns for long-term investments. A shorter time period would also have too few sample points to produce reliable estimates from monthly sampling.

The September 2010 Draft Report compared equity and asset betas for a sample of OECD countries using monthly and weekly data over five-years. The equity betas obtained from Bloomberg cannot be directly compared because different companies have different gearing ratios which result in different levels of risk. To produce comparable estimates, the equity betas were de-levered to obtain asset betas, which can be directly compared across companies. The benchmark asset beta was then re-levered using Telstra's gearing ratio to obtain the benchmark equity beta for Telstra. The ACCC used the Monkhouse formula to convert asset betas to equity betas.¹³⁵

The ACCC considered that greater weight should be placed on estimates based on monthly data sampling than weekly data sampling because:

- it is the more commonly recommended estimation interval and length used in financial markets
- it picks up the systematic risk of an investment in Telstra's equity to the equity market as a whole over the monthly holding period which the ACCC considered was more representative of the risks facing longer term investors than using weekly or daily data holding period returns

¹³¹ In response to submissions by Telstra, the ACCC has previously considered the direct estimation approach for the equity beta and found potential difficulties in using this approach. ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 222.

¹³² These include Cyprus; Malta; Luxembourg; Norway; Iceland; Belgium; Slovenia; and Ireland.

¹³³ *Application by Telstra Corporation Limited* [2010] ACompT 1, p. 100.

¹³⁴ Ovum, *Review of the economic principles, capital cost and expense calculations of the Telstra Efficient Access cost model*, 6 August 2008, p. 36.

¹³⁵ P Monkhouse, 'Adapting the APV Valuation methodology and the Beta Gearing Formula to the Dividend Imputation Tax System', *Accounting and Finance*, 37(1), 1997, pp. 69-88. The

Monkhouse formula is expressed as:
$$\beta_e = \beta_a + (\beta_a - \beta_d) * \left[1 - \frac{E[K_d]}{1 + E[K_d]} \right] * [(1 - \gamma) * t] * \frac{D}{E}$$

- it is also likely to remove trading effects.

The international benchmarking results suggested a benchmark asset beta of 0.39. The ACCC noted that this estimate may have been influenced by the global financial crisis,¹³⁶ but considered that any downward bias in the benchmark value would be offset by the different composition of the benchmarked firms' businesses compared to Telstra's CAN.

The systematic risk associated with business lines like mobile communications is likely to be significantly higher than the systematic risk associated with fixed line services. Since the benchmarked firms provide both fixed and mobile networks, the benchmark asset beta is likely to be higher than the asset beta of Telstra's CAN alone. The ACCC has previously stated that the appropriate WACC for the ULLS is one based on a business providing access to a fixed line CAN.¹³⁷

The ACCC also noted that, in its most recent decisions, the AER stated that the empirical evidence from Australia and overseas indicated that an appropriate range for the equity beta of a regulated utility was between 0.41 and 0.68.¹³⁸

The ACCC concluded that an equity beta of 0.7 was appropriate as it took into account regulatory stability and was consistent with the approach adopted in recent ACCC and AER decisions for other regulated utilities.¹³⁹ The ACCC noted that it had taken a conservative approach in applying a value for the equity beta for Telstra's CAN that is at the top of the range of empirical estimates in the AER's WACC review.

Submissions on the equity beta

Telstra submitted that the ACCC should adjust the Telstra-wide equity and asset betas in order to estimate the fixed line only equity and asset betas. It considered that market estimated betas for Telstra in recent years may be downward biased because many businesses outside the resource sector, and specifically telecommunications companies, did not benefit from the resources boom.

VHA suggested that, in benchmarking against foreign telecommunications firms, the ACCC should compare Telstra against a sample of firms that provide broadly the same services as Telstra provides. VHA also submitted that international benchmarking of the equity beta serves little purpose other than providing an initial reference point.

¹³⁶ Telecommunications companies were regarded as a 'safe' stock for investors during their 'flight from risk'.

¹³⁷ ACCC, *Unconditioned Local Loop Service: Pricing principles and indicative prices*, June 2008.

¹³⁸ AER, *Electricity transmission and distribution network service providers—Review of the weighted average cost of capital (WACC) parameters: Final decision*, May 2009.

¹³⁹ The AER took a 'cautious approach' in adopting an equity beta of 0.8 for the regulated electricity businesses. It was mindful of regulatory stability in moving from state-based to national regulation where the equity betas previously adopted had ranged from 0.7 to 1.1. The ACCC's 2010 Australia Post decision used an asset beta of 0.355 and an equity beta of 0.463. In its draft pricing principles for rural water corporations, the ACCC proposed an equity beta of 0.7. These values are both within the range of empirical estimates identified in the AER's WACC review. See AER, *Electricity transmission and distribution network service providers—Review of the weighted average cost of capital (WACC) parameters: Final decision*, May 2009; ACCC, *Australian Postal Corporation 2010 price notification—Decision*, May 2010; ACCC, *ACCC pricing principles for price approvals or determinations under the Water Charge (Infrastructure) Rules—Draft*, July 2010.

Optus supported benchmarking against international firms, but it submitted that the methodology used to estimate the equity beta was upward-biased, due to the different composition of benchmarked firms' services. Optus proposed that the ACCC should disaggregate the estimate of Telstra's equity beta to reflect differing levels of systematic risk faced by different areas of Telstra's business. It also submitted that the 40:60 benchmark gearing ratio for Telstra, compared to the 60:40 benchmark gearing ratio used in the AER's WACC Review, meant that the corresponding equity beta for Telstra would be significantly outside the range of empirically estimated equity betas found in the WACC Review if the AER's benchmark gearing ratio was applied.

ACCC proposed view on the equity beta

The ACCC proposes to retain the equity beta of 0.7 used in the September 2010 Draft Report. In estimating prices for the IADs, the ACCC used an equity beta of 0.7.

The ACCC acknowledges the concerns raised in submissions that international benchmarking does not isolate the fixed line-specific risk from the Telstra-wide risk. However, there is insufficient international data to allow the ACCC to estimate an asset beta for the fixed line services alone.

Benchmarking against international firms avoids the issue raised by Telstra that the mineral resources boom may have depressed its asset beta since foreign firms' asset betas will not have been affected by Australia's mining boom. An updated benchmarking sample is shown in table 6.8. It uses the same methodology as the September 2010 Draft Report, but uses updated equity beta and debt/equity ratios for each firm and updated WACC parameter estimates.

The updated benchmark estimates of equity and asset betas exhibit some differences relative to the benchmark estimates in the September 2010 Draft Report. The estimated average monthly equity beta fell to 0.596 (from 0.677) while the estimated average weekly equity beta increased to 0.664 (from 0.614). The updated monthly and weekly asset betas—which are based on the updated equity betas, firm debt/equity ratios and several WACC parameters (gamma, the company tax rate and the cost of debt)—show corresponding changes. The average debt/equity ratio increased to 0.783 from 0.738 in the September 2010 Draft Report.

The ACCC notes that excluding Telstra from the benchmark sample would have a relatively minor effect on the estimated betas.¹⁴⁰ However, excluding Telstra from the sample would only be warranted if a Telstra-specific asset beta for the fixed line services was estimated and then checked for reasonableness against a benchmarked sample of other firms. The ACCC proposes not to adopt this approach.

The ACCC has considered Optus' argument that an equity beta of 0.7 would be significantly outside the AER's range of empirical estimates if the AER's benchmark gearing ratio of 60:40 was used. The ACCC notes, first, that the AER's range of equity betas was estimated directly and did not therefore rely on any particular gearing ratio. Second, applying the AER's benchmark gearing ratio to an equity beta of 0.7 would imply an asset beta of around 0.3. While the benchmark asset beta estimated for telecommunications firms is somewhat higher than 0.3, the ACCC has previously highlighted that the benchmark asset beta is likely to be higher than the

¹⁴⁰ The average equity beta estimate would increase by around 0.01, while the average asset beta would increase by around 0.005.

asset beta of Telstra's fixed line CAN alone. Therefore, the ACCC maintains its view that an equity beta of 0.7 is appropriate.

The ACCC proposes to use an equity beta of 0.7 in estimating prices for the FADs.

Table 6.8 Updated benchmark estimates of equity and asset betas across OECD countries

Firm	5 year monthly equity beta	5 year weekly equity beta	5 year monthly asset beta	5 year weekly asset beta	Debt/Equity Ratio	Country of Origin
AT&T Inc.	0.654	0.76	0.482	0.561	0.36	US
Qwest Communications Intl	0.793	1.304	0.315	0.518	1.536	US
Verizon Communications Inc.	0.676	0.717	0.465	0.493	0.46	US
Cincinnati Bell Inc.	1.562	1.281	0.432	0.354	2.65	US
BCE Inc.	0.449	0.153	0.302	0.103	0.492	Canada
BT Group PLC	1.014	0.812	0.511	0.409	0.996	Britain
Telekom Austria AG	0.556	0.707	0.350	0.444	0.598	Austria
Telecom Italia SpA	0.492	0.85	0.203	0.351	1.436	Italy
Hellenic Telecommunications Organisation SA	0.499	0.562	0.300	0.338	0.672	Greece
TDC A/S	0.151	0.184	0.077	0.093	0.98	Denmark
Portugal Telecom SGPS SA-REG	0.66	0.894	0.360	0.487	0.846	Portugal
TeliaSonera AB	0.662	0.701	0.544	0.576	0.22	Sweden/ Finland
Telefonica SA	0.696	0.762	0.425	0.466	0.644	Spain
Deutsche Telekom AG-REG	0.377	0.643	0.203	0.346	0.868	Germany
France Telecom SA	0.443	0.535	0.253	0.306	0.76	France
Koninklijke KPN NV	0.26	0.45	0.162	0.280	0.614	Netherlands
Swisscom AG-REG	0.329	0.55	0.233	0.390	0.416	Switzerland
Nippon Telegraph & Telephone Corporation	0.438	0.559	0.246	0.314	0.792	Japan
Singapore Telecom Ltd	0.796	0.772	0.694	0.674	0.148	Sing
PCCW Ltd	0.155	0.075	0.067	0.032	1.336	Hong Kong
Bezeq The Israeli Telecom Corp Ltd	0.511	0.418	0.370	0.303	0.384	Israel
Telecom Corp of New Zealand	1.212	1.189	0.829	0.813	0.468	New Zealand
Telstra Corp Ltd	0.318	0.396	0.241	0.300	0.322	Australia
Average	0.596	0.664	0.351	0.389	0.783	

Source: Bloomberg Data Services, data as at February 2011.

Equity issuance costs

Equity issuance costs are the fees associated with issuing new equity capital. Since equity issuance costs are only incurred when a business raises equity capital, the ACCC's view in the September 2010 Draft Report was that Telstra should not be compensated for costs it has not incurred. The ACCC considered that equity issuance costs should be recovered as a cash flow (operating expenditure) allowance when a business raises equity capital and should not be included in the WACC.

Submissions on equity issuance costs

Telstra submitted that it is indifferent between recouping equity issuance costs through a specific cash flow or through a margin on the WACC, if the costs are appropriately quantified.

ACCC view on equity issuance costs

The ACCC maintains its view that equity issuance costs should be recovered as a cash flow (operating cost) allowance when Telstra raises equity capital. It has not therefore included equity issuance costs in the WACC.

6.3.3 Cost of debt

The cost of debt is given as the sum of the risk-free rate and a margin for debt, including the costs of raising debt:

$$E[Kd] = rf + \text{debt risk premium} + \text{debt issuance costs}$$

where $E[Kd]$ = the required/expected return on debt
 rf = the risk-free rate

To maintain consistency within the WACC formula, the risk-free rate used to estimate the cost of debt must be equal to the risk-free rate used to calculate the return on equity.

Debt risk premium (DRP)

The DRP accounts for debt-specific risk compensation over and above the risk-free rate. The DRP is dependent on the firm's gearing level, its credit rating and the term of the debt.

The DRP is derived as the difference between the yield to maturity (YTM) on the chosen debt proxy (for example, 10 year A-rated bond yields) and the yield to maturity on the chosen risk-free proxy (for example, 10 year Commonwealth Government Security (CGS) bond yields). In the past, the value for the YTM on the chosen debt proxy was usually derived from a benchmark bond index obtained from a reputable financial market data source.

The ACCC has previously used Bloomberg's A-rated cost of debt benchmark in estimating Telstra's vanilla and pre-tax WACC.¹⁴¹ As of August 2009, Bloomberg ceased publishing A-rated fair yield curves beyond seven years. This approach can no longer be used to estimate the DRP based on 10 year CGS bond yields.

September 2010 Draft Report DRP

In the September 2010 Draft Report, the ACCC considered that a suitable methodology for estimating an appropriate DRP was to take the longest maturity A-rated bond fair yield estimate available from Bloomberg and add to this an estimate of the term premium going from the maturity of the longest dated A-rated bond out to ten years as estimated from the next (higher) credit rating Bloomberg fair yield curve quoted out to at least ten years. The same averaging period as the risk-free rate was applied to the DRP.

¹⁴¹ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 205.

The DRP was calculated over a 10 day averaging period from 2 June to 15 June 2010. This produced a value of 3.07 per cent for the DRP.

Submissions on the DRP

Telstra submitted that a Telstra-specific DRP should be used, rather than estimating a DRP for a benchmark A-rated bond, because the benchmark bond may not reflect the financial position of the regulated business. Telstra considered that the benchmark should only be used as a reasonableness check. It also expressed concerns about the ACCC's methodology—in particular, the method used to derive the term premium on the A-rated bond and the failure to disclose details of the companies in the A-rated sample. However, it concluded that the 3.07 per cent nominal DRP calculated in the September 2010 Draft Report was a reasonable estimate for a wholesale fixed line services provider.

On 10 November 2010, the ACCC wrote to Telstra requesting further information on Telstra's proposed alternative methodology for calculating the DRP.¹⁴² As part of the request, the ACCC asked that Telstra provide specific information on the methodology, data sources and a proposed value.

On 22 November 2010, Telstra responded that the relevant DRP is one which would apply to a stand-alone provider of the CAN. Given that this is not observable, Telstra contended that the Telstra-wide DRP was a suitable proxy. It proposed a three-step process for calculating the CAN-only DRP:

- estimate a range for the Telstra-wide DRP
- make qualitative adjustments to this range of values to reflect any CAN-specific risks
- benchmark the CAN-specific range to determine its reasonableness.

However, Telstra did not provide a Telstra-specific DRP estimate calculated using this methodology. It reiterated its view that the DRP proposed in the September 2010 Draft Report was reasonable.

VHA submitted that an industry-specific DRP should be calculated rather than calculating a benchmark DRP based on credit rating. It considered that the market-wide benchmark could overstate the DRP for telecommunications firms' bonds.

ACCC proposed view on the DRP

In recognition of the problems caused by the absence of any Bloomberg A-rated fair yield curve beyond seven years, the ACCC proposes to adopt a different method of calculating the DRP to that adopted in the September 2010 Draft Report. The ACCC considers that the appropriate methodology would be to use a benchmark A-rated bond to estimate the efficient cost of debt of an A-rated telecommunications business.

In the absence of a benchmark A-rated bond, the ACCC has used Telstra's actual cost of debt as a proxy for a benchmark in calculating the DRP.

In calculating IAD prices, the ACCC took the average yield on the Telstra bond maturing on 15 July 2020¹⁴³ (average yield of 7.81 per cent) and subtracted the

¹⁴² ACCC, *Fixed Line Pricing Principles review – Request further information* (Letter from Mr Robert Wright to Telstra), 10 November 2010.

¹⁴³ Bloomberg ticker: EI291758 Corp

corresponding average yield on the Bloomberg 10 year CGS¹⁴⁴ (average yield of 5.61 per cent), to estimate a DRP of 2.19 per cent. The averaging period used was the same 20 day period as used for estimating the risk-free rate, that is, 6 December to 31 December 2010.

The DRP estimate of 2.19 per cent has also been used in calculating draft FAD prices. The ACCC intends to update the DRP in calculating FAD prices.

Gearing level

The gearing level of a firm refers to the ratio of debt to equity that a firm uses to finance its capital. The gearing level is used to weight the return on equity and cost of debt in the WACC formula. Where the firm's capital structure is highly geared (that is, the firm has a high level of debt), this implies greater financial risk for the firm and therefore a greater required rate of return for both equity and debt holders.

September 2010 Draft Report gearing level

In the September 2010 Draft Report, the ACCC noted that it has previously adopted a debt/equity ratio of 40:60 per cent in telecommunications decisions.¹⁴⁵ Ovum's analysis of Telstra's accounts as part of the ACCC's assessment of the ULLS undertaking found an average level of 34 per cent debt to 66 per cent equity across its entire business.¹⁴⁶ However, the ACCC considered that the CAN was less risky than Telstra's other operations (such as mobiles) and therefore should be able to service more debt. Telstra's debt ratio at the time of privatisation was 41.3 per cent, when it more closely resembled a pure fixed line service operator.¹⁴⁷ The ACCC therefore used a debt/equity ratio of 40:60 in the September 2010 Draft Report, as an appropriate gearing level for the CAN assets.

Submissions on the gearing ratio

There were no submissions on the gearing ratio.

ACCC proposed view on the gearing ratio

The ACCC maintains its view that a debt/equity ratio of 40:60 is appropriate.

Debt issuance costs

Debt issuance costs are the costs associated with raising debt. They can be recovered through a direct cash flow allowance or an adjustment to the WACC. In the past, the ACCC has accepted the inclusion of debt issuance costs in the return on debt.¹⁴⁸ This approach was adopted following recommendations by the Allen Consulting Group in a report for the ACCC in the context of decisions made regarding gas and electricity.¹⁴⁹

¹⁴⁴ Bloomberg ticker: C12710Y Index

¹⁴⁵ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 232.

¹⁴⁶ Ovum, *Economic review*, 6 August 2008, p. 38.

¹⁴⁷ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 232.

¹⁴⁸ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 206.

¹⁴⁹ The Allen Consulting Group, *Debt and Equity Raising Transaction Costs – report to the Australian Competition and Consumer Commission*, December 2004.

September 2010 Draft Report debt issuance costs

The ACCC's view on debt issuance costs was that debt raising costs vary depending on the amount of debt on issue. Increasing the amount of debt on issue results in lower debt issuance costs due to economies of scale.

The CAN as a standalone debt financed asset would be a large company with a large debt portfolio. Since Telstra is much larger than a typical gas and electricity company, Telstra was expected to have more debt on issue compared to gas and electricity companies. The ACCC considered therefore that its expected debt issuance costs would be at the lower range of estimates. The ACCC considered that the appropriate debt issuance cost was 8.5 basis points assuming six debt issues of \$500 million.

Submissions on debt issuance costs

Telstra considered that the estimate of debt issuance costs of 8.5 basis points used in the September 2010 Draft Report was reasonable. Optus also supported the ACCC's estimate of debt issuance costs.

ACCC proposed view on debt issuance costs

The ACCC has updated its calculation of debt issuance costs, shown in table 6.9. Consistent with its reasoning in the September 2010 Draft Report, the ACCC maintains its view that debt issuance costs should be set assuming six debt issues of \$500 million, which results in an updated estimate of debt issuance costs of 8.3 basis points. The ACCC proposes to set the allowance for debt issuance costs at 8.3 basis points.

Table 6.9 Indicative direct debt raising costs based on a nominal vanilla WACC of 9.04 per cent

	Estimated costs	1 issue	2 issues	4 issues	6 issues	10 issues	12 issues
Total amount raised	Multiples of median MTN* (\$500m)	\$500m	\$1000m	\$2000m	\$3000m	\$5000m	\$6000m
1. Gross underwriting fee	Bloomberg spread, upfront per issue, amortised	7.02	7.02	7.02	7.02	7.02	7.02
2. Legal and roadshow	\$115k upfront per issue, amortised	0.36	0.36	0.36	0.36	0.36	0.36
3. Company credit rating fee	\$50k per annum	1.00	0.50	0.25	0.17	0.10	0.08
4. Issue credit rating	4 basis points upfront per issue, amortised	0.62	0.62	0.62	0.62	0.62	0.62
5. Registry fees	\$3.5k per issue, per annum	0.07	0.07	0.07	0.07	0.07	0.07
6. Paying fees	\$4/\$1million, per annum	0.04	0.04	0.04	0.04	0.04	0.04
Total	Basis points per annum	9.1	8.6	8.4	8.3	8.2	8.2

Source: ACG, Bloomberg,

* Medium term note

Debt beta

The debt beta measures the systematic risk of debt. It represents the amount of market risk that holders of debt securities bear or are assumed to bear. A debt beta of zero per cent has previously been supported by Telstra and Ovum¹⁵⁰ and adopted by the ACCC.¹⁵¹

September 2010 Draft Report debt beta

Consistent with previous decisions, the ACCC adopted a value of zero for the debt beta.

Submissions on debt beta

There were no submissions on the debt beta.

ACCC proposed view on the debt beta

The ACCC maintains its view that a value of zero for the debt beta is appropriate.

Imputation factor (gamma)

The gamma parameter represents the market value of tax credits, otherwise referred to as imputation credits, generated by the company that could be distributed in the form of franked dividends to shareholders. Under Australia's imputation tax system, dividends distributed by the company from post-tax earnings carry imputation credits

¹⁵⁰ Telstra, *WACC submission*, 4 April 2008, p. 45. Ovum, *TEA model (v1.0) economic review*, 6 August 2008, p. 38.

¹⁵¹ ACCC, *Final decision: Assessment of Telstra's Unconditional Local Loop Service Band 2 monthly charge undertaking*, April 2009, p. 243.

that can be used by local residents to offset their personal tax liabilities. Imputation credits represent a benefit from the investment additional to dividends or capital gains.

The gamma parameter is not a direct input in the vanilla WACC formula. In the FLSM, all tax effects including imputation benefits are captured in cash flows rather than the WACC.¹⁵²

The general regulatory approach in Australia has been to define the gamma as the utilisation rate multiplied by the imputation payout ratio:¹⁵³

$$\gamma = \theta * F$$

where θ = (theta) the utilisation rate of imputation credits is the value of distributed imputation credits to investors as a proportion of their face value.¹⁵⁴

F = the imputation payout ratio is the face value of imputation credits distributed by the firm as a proportion of the face value of imputation credits generated by the firm, that is, the tax paid by the business

Imputation credits, and hence the gamma parameter, have a range of values. The gamma can range from zero (where imputation credits are not distributed and/or not valued by investors) to one (where imputation credits are fully distributed and fully valued by investors). For example, where the investor is not a local resident and pays no Australian taxes, the value of imputation credits to such an investor would be zero.

Since foreign investors cannot generally make use of imputation credits, the balance between foreign and domestic shareholders can be a factor in determining the appropriate value of gamma.

The value of gamma associated with communications access pricing has in the past been set at the midpoint of the possible range between zero and one.¹⁵⁵ The mid-point of the possible range was chosen for a number of reasons, including the complexity of the issues and the wide divergence of estimates produced by expert studies.

The method most commonly used to produce empirical estimates of theta is economy-wide dividend drop-off studies, which measure the extent to which an average company's share price drops once it goes ex-dividend.¹⁵⁶ These studies exhibit wide

¹⁵² With a vanilla WACC, the tax rate parameter (τ) and the dividend imputation franking credit parameter (γ) are still relevant. These parameters are used to adjust cash flows rather than being included within the WACC equation. Gamma measures the amount by which the rate of return required by shareholders is reduced to reflect the fact that the corporate tax paid by the regulated business is treated as a pre-payment of personal tax on behalf of the shareholders.

¹⁵³ This formula only applies where retained imputation credits have no value and/or the imputation payout ratio, F , is equal to 1. If both of these assumptions do not hold, the gamma formula is:

$$\gamma = F * \theta + (1 - F) * \psi$$

where parameters are defined as above, and ψ (psi) is the per dollar value of a retained imputation credit ($\psi > 0$), which is a function of the appropriate discount rate, say δ (delta), and the expected retention period, say τ (tau). See AER, *Electricity transmission and distribution network service providers – Review of the weighted average cost of capital (WACC) parameters – Final decision*, May 2009, p. 414; J C Handley, *Further Comments on the Valuation of Imputation Credits – Final*, 15 April 2009.

¹⁵⁴ Where the domestic CAPM is used, the utilisation rate is the utilisation rate of the average Australian investor.

¹⁵⁵ ACCC, *Unconditioned Local Loop Service – Pricing Principles and Indicative Prices*, June 2008.

¹⁵⁶ Since an F value of one was typically assumed in many of these studies, the value of gamma was equal to the estimated value of theta. No industry-specific studies have been undertaken.

divergences in their results, reflecting the widely recognised problem of disaggregating the ex-dividend price drop between the value of the cash dividend and the value of the attached imputation credits.¹⁵⁷ The ACCC considered therefore that these studies' estimates of gamma should be treated with caution.

September 2010 Draft Report gamma

For the September 2010 Draft Report, the ACCC reviewed whether a gamma of 0.5 remained appropriate for the telecommunications industry. In doing so, it considered the findings of recent economy-wide empirical studies.¹⁵⁸ These studies found a range of gamma values. The ACCC therefore considered empirical evidence specific to the telecommunications industry in reaching a view on an appropriate gamma value for the industry.

In estimating the utilisation rate, theta, for the September 2010 Draft Report, the ACCC took into account the shareholder limitations in section 8BG(a) of *Telstra Corporation Act 1991* that restrict aggregate foreign ownership of Telstra to 35 per cent.¹⁵⁹ Since imputation credits cannot generally be utilised by foreigners, the ACCC considered that a gamma of 0.65 would reflect the benchmark value of imputation credits available to the remaining domestic shareholders. Franking credits are fully redeemable by Australian shareholders even if some of those shareholders pay little or no tax. Since 1 July 2000, franking credits can be redeemed for cash when the shareholder's tax liabilities are less than the franking credits to which they are entitled.¹⁶⁰

Since imputation credits cannot be utilised by foreigners, but are redeemable to Australian shareholders regardless of tax status, the ACCC considered that a theta of 0.65 was appropriate.

Empirical analysis showed that the average dividend payout ratio for Telstra from 2000 to 2010 was 100.3 per cent.¹⁶¹ Telstra also distributed 100 per cent of its franking credits. Therefore, the ACCC considered that the value of F for Telstra should be set at 1.0.¹⁶²

¹⁵⁷ See, for example, M Dempsey and G Partington, 'The cost of capital equations under the Australian imputation tax system', *Accounting and Finance*, vol. 48, issue 3, Sept 2008, pp. 439-460 and SFG Consulting, *The impact of franking credits on the corporate cost of capital: Empirical evidence*, Report prepared for Envestra, March 2007.

¹⁵⁸ Including D Beggs and C L Skeels, 'Market arbitrage of cash dividends and franking credits', *The Economic Record*, vol. 82, no. 258, September 2006; J C Handley and K Maheswaran, 'A measure of the efficacy of the Australian imputation tax system', *The Economic Record*, vol. 84, no. 264, March 2008; SFG, *The impact of franking credits on the cost of capital of Australian companies*, Report prepared for Envestra, Multinet and SP AusNet, October 2007.

¹⁵⁹ Telstra has estimated that as at 4 March 2011, the number of Telstra shares recorded as foreign on the Telstra register was 23.61 percent of the total number of issued Telstra shares. See Telstra's website www.telstra.com.au/abouttelstra/investor/faqs.

¹⁶⁰ Richard Heaney, *Dividend imputation in Australia: the value of franking account balances*, December 2009.

¹⁶¹ Bloomberg. Subsequent checking of the calculations indicated that the correct value is 99.4 per cent.

¹⁶² The value of F cannot be benchmarked against overseas carriers, as is the case for the asset beta, as there are different tax regimes and industry structures in other countries. No Australian studies have attempted to estimate a benchmark value of F for the telecommunications industry. Given the dominance of Telstra within the telecommunications industry, an Australian benchmark would be heavily influenced by Telstra's payout ratio.

Taking into account Telstra's actual dividend payout ratio, franking credit distribution and foreign ownership restrictions, the ACCC adopted a value for gamma of 0.65 in the September 2010 Draft Report.

Submissions on gamma

Telstra considered that the value of gamma used in the September 2010 Draft Report, 0.65, was too high, and instead proposed a value of 0.36. Telstra submitted that the value of the payout ratio used in the September 2010 Draft Report—which was calculated from Bloomberg data—overstated Telstra's actual payout ratio. Telstra also disputed the value of theta used in the September 2010 Draft Report. In Telstra's view, empirical estimates derived from dividend drop-off studies should be used to establish the value of theta, rather than relying on a 'theoretical' approach.

Optus supported a gamma value of 0.65, which it noted was consistent with the gamma value estimated in the AER's WACC review.

ACCC proposed view on gamma

After considering the available information and submissions set out above, the ACCC's view is that a benchmark economy-wide gamma is preferred to a business-specific approach to setting gamma because the benchmark approach provides stronger incentives to operate efficiently.

The ACCC proposes to adopt an economy-wide value for gamma of 0.45. In setting the value of gamma, the ACCC has had regard to economy-wide empirical evidence set out in recent AER decisions.¹⁶³ The ACCC recognises that there is some uncertainty around the value of the gamma and seeks submissions on the appropriate value.

6.4 Regulatory depreciation

Regulatory depreciation is the return of capital, that is, the allowances included in the revenue requirement to allow Telstra to recover its investments in the assets used to supply the fixed line services over the lives of those assets.

6.4.1 September 2010 Draft Report regulatory depreciation

In the September 2010 Draft Report, the ACCC proposed to use the straight line method to calculate regulatory depreciation. This method divides the up-front cost of the asset by the asset life to spread annual depreciation expenses equally over the life of the asset. Use of straight line depreciation is consistent with the approach adopted by the ACCC and AER for other regulated industries.

Estimates of the expected lives of assets in the CAN and Core are required to determine a depreciation schedule for these assets. Because the majority of these assets are not new, and have therefore already been partly depreciated, their remaining asset lives must be estimated to set the time period over which the remaining depreciation is recovered.¹⁶⁴ Since each asset class contains a mixture of assets put in place at different times, an average asset life and average remaining asset life is estimated for each asset class (see chapter 5). This method was adopted in the

¹⁶³ AER, *Draft Decision: Envestra Ltd – Access arrangement proposal for the SA gas network: 1 July 2011– 30 June 2016*, February 2011.

¹⁶⁴ The amount of depreciation already recovered has been taken into account in setting the initial RAB values.

September 2010 Draft Report to determine the amount of regulatory depreciation allowed in each year of the regulatory period.

In that report, the ACCC stated that, in order to facilitate price certainty and stability, it may decide to smooth the prices estimated by the FLSM or to adopt a glide path to ease the adjustment to a new level of prices. The ACCC noted that, if such an approach was taken, it would effectively alter the profile of depreciation over the regulatory period (or longer if a glide path that extended across more than one regulatory period was adopted) since depreciation is effectively a residual. In this case, the depreciation received in any particular year would not strictly conform to a straight line methodology.

6.4.2 Submissions on regulatory depreciation

Macquarie Telecom and AAPT both supported the use of straight line depreciation. VHA also supported the use of straight line depreciation, noting that it is simple, transparent and consistent with previous decisions by the ACCC and AER.

Frontier Economics, on behalf of the Competitive Carriers Coalition, supported the use of straight line depreciation for depreciating both the existing RAB and new capital expenditure. However, it questioned the need to smooth service prices, which would change the pattern of depreciation.

Optus stated that the straight line depreciation methodology is appropriate, provided that the agreement between Telstra and NBN Co is not finalised. However, it considered that if straight line depreciation is used and the Telstra–NBN Co agreement is finalised, Telstra would be over-compensated. Optus submitted that given the uncertainty over the agreement, depreciation should be back-loaded to ensure that Telstra is not over-compensated in the period prior to the agreement.

Telstra did not specifically comment on whether straight line depreciation was appropriate. However, it submitted that:

depreciation should be calculated by reference to each asset’s economic life (ie, the length of time over which the asset will, in practice, be used to provide services) rather than its technical life (ie, the length of time that the asset could, in theory, operate).¹⁶⁵

Telstra stated that the rapid pace of technological change in the telecommunications industry, commercial uncertainties, and public policy and regulatory changes could all cause an asset’s economic life to differ from its technical life. In particular, it submitted that ‘the imminent rollout of the NBN will almost certainly truncate the economic lives of a considerable proportion of Telstra’s CAN and Core assets’.¹⁶⁶ Telstra stated that it reviews, and as necessary revises, the economic lives of its major assets on an annual basis.

6.4.3 ACCC view on regulatory depreciation

The approach to depreciation advocated by Telstra would not match a straight line depreciation method. Annual depreciation allowances would be likely, for many assets, to vary over time as the economic life of the asset was revised in response to changes in technological, economic and regulatory circumstances. Telstra’s proposal to truncate the economic lives of most of its CAN and Core assets (to reflect the planned roll-out of the NBN) would amount to front-loading of depreciation.

¹⁶⁵ Telstra submission, p. 102.

¹⁶⁶ *ibid.*, p. 104.

In contrast, Optus has proposed that depreciation should be back-loaded to reflect the planned roll-out of the NBN.

The ACCC considers that the straight line depreciation methodology remains appropriate. It does not consider that front-loading or back-loading of depreciation is warranted since payments under the proposed deal between Telstra and NBN Co are expected to compensate Telstra for unrecovered depreciation on assets no longer used to provide the fixed line services following the roll-out of the NBN.

The ACCC adopted straight line depreciation in estimating prices for the IADs and draft prices for the FADs. However, in estimating the draft FAD prices, the ACCC made an adjustment to the profile of depreciation for the last two years of the regulatory period, ie. 2014-15 and 2015-16.

Prior to making this adjustment, regulatory depreciation followed a U-shaped profile from 2014-15 to 2019-20. This profile was a mathematical consequence of commencing the FLSM part-way through the lives of Telstra's assets but was not expected to reflect the actual path of regulatory depreciation. This effect was most significant for asset classes with relatively short asset lives (less than ten years) and less than five-years remaining at the commencement of the regulatory period.¹⁶⁷ These assets are 'pair gain systems', 'local switching equipment', and 'indirect capital assets'.

The ACCC has extrapolated the inputs to the FLSM for the full 11 year estimation period (2010-11 to 2020-21) to identify the underlying trend level of regulatory depreciation, excluding the artificial drop in regulatory depreciation for these assets. It has substituted a trend level of regulatory depreciation for the three asset classes in the years affected by the artificial drop. The U-shaped depreciation profile for these asset classes is shown in table 6.10. The table also shows the trend depreciation values the ACCC has used in estimating prices. These trend values reflect the forecast declines in investment in CAN and Core assets.

¹⁶⁷ At the commencement of the FLSM, each asset class is assigned an average remaining asset life. In practice, investment in new assets is likely to have occurred over a period of years instead of all at one point in time. While setting an average asset life simplifies the construction of the FLSM, it introduces lumpiness in the profile of regulatory depreciation. In contrast, the forecast capital expenditures included in the FLSM occur more smoothly over time. In the initial years of the FLSM, this results in a U-shaped depreciation profile for some assets. An artificial drop in estimated regulatory depreciation occurs when short-lived assets reach the ends of their lives in the same year before they are fully replaced by investments over time in replacement assets.

Table 6.10: Estimated regulatory depreciation—2009-10 to 2020-21

Asset Class	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
CAN asset class												
Ducts and pipes	264	268	270	273	276	278	281	283	286	288	290	293
Copper cables	325	330	332	335	338	340	343	207	23	25	28	30
Other cables	1	3	5	7	9	11	13	15	17	19	21	23
Pair gain systems	123	124	125	52	6	7	9	10	11	13	14	15
CAN radio bearer equipment	69	69	23	0	0	0	0	0	0	0	0	0
Other CAN assets	0	0	0	0	0	0	0	0	0	0	0	0
Other communications plant and equipment	1	1	1	1	1	2	2	2	2	1	2	2
Network land	0	0	0	0	0	0	0	0	0	0	0	0
Network buildings/support	22	23	24	25	26	27	28	29	30	31	32	33
Indirect capital assets	187	206	225	245	264	96 <i>190</i>	116 <i>190</i>	135 <i>190</i>	154 <i>190</i>	173 <i>190</i>	193	193
Total	991	1,023	1,007	938	920 <i>929</i>	762 <i>864</i>	791 <i>872</i>	682 <i>742</i>	524 <i>563</i>	551 <i>570</i>	580 <i>581</i>	589
Core asset class												
Switching equipment - Local	228	230	59	3 8	4 8	5 8	5 8	6 8	7 8	7 8	8	8
Switching equipment - Trunk	7	7	1	0	0	0	0	0	0	0	0	0
Switching equipment - Other	0	0	0	0	0	0	0	0	0	0	0	1
Inter-exchange cables	105	108	110	112	114	116	118	120	123	125	126	128
Transmission equipment	317	328	337	346	355	213	56	64	73	81	89	97
CORE radio bearer equipment	38	38	39	39	40	25	3	3	4	4	4	5
Other communications plant and equipment	1	1	2	2	2	2	2	3	3	3	3	4
Network land	0	0	0	0	0	0	0	0	0	0	0	0
Network buildings/support	125	130	136	143	149	155	161	167	173	179	185	190
Indirect capital assets	129	142	155	168	181	66 <i>130</i>	79 <i>130</i>	93 <i>130</i>	106 <i>130</i>	119 <i>130</i>	132	132
LSS equipment	-	-	-	-	-	-	-	-	-	-	-	-
Total	950	984	838	814 <i>818</i>	846 <i>850</i>	583 <i>650</i>	426 <i>479</i>	457 <i>496</i>	488 <i>513</i>	518 <i>530</i>	549 <i>549</i>	566

Notes: Figures shown in italics denote values that have been adjusted by the ACCC to reflect the underlying trend value for the years shown. Estimated depreciation for years beyond the regulatory period has been calculated by extrapolating forecast operating and capital expenditures in the regulatory period.

7 Operating expenditure

Key points

- Forecast operating expenditure forms a cost block in the building block approach and therefore contributes directly to Telstra's total revenue requirement.
- In November 2010, Telstra provided more accurate information on actual operating expenditures incurred in providing the declared fixed line services. However, it did not provide forecasts of operating expenditure.
- The ACCC has revised its forecasts for direct and indirect operating expenditure to reflect submissions and the additional information provided by Telstra:
 - Direct CAN operating expenditure is assumed to remain constant in real terms at its most recent actual level (for 2009-10) to reflect recent reductions in CAN operating costs.
 - Direct Core operating expenditure is forecast to remain stable in real terms at the average real level of Telstra's actual operating expenditures over the five-years to 2009-10.
 - The mark-up for indirect operating expenditure (that is, corporate overheads) has been revised up to 80 per cent (from the 10 per cent incorrectly applied in the September 2010 Draft Report).
 - Revisions have been made to reflect changes in the asset classes included in the FLSM.
- The ACCC proposes that no adjustments will be made for 'unders or overs' in actual, compared to forecast, operating expenditures over the regulatory period.
- Total operating expenditure has been allocated to each asset class according to its share of the total undepreciated asset value for that year.

Operating expenditure is one of the cost blocks in the FLSM. Forecast operating expenditure contributes directly to the estimated revenue requirement over the regulatory period.

7.1 *September 2010 Draft Report operating expenditure forecasts*

In the September 2010 Draft Report, the ACCC noted that it intended to obtain operating expenditure forecasts from Telstra for future regulatory periods.¹⁶⁸ In the absence of these forecasts, the ACCC developed its own forecasts of operating expenditure for 2010–11 to 2013–14 for the purpose of estimating draft indicative prices.

Forecast direct operating expenditures were based on Telstra's average actual operating and maintenance expenditures in the five-years to 2009–10 included in Telstra's RAF reports. Operating and maintenance expenses related to the asset

¹⁶⁸ See section 4.2 for detail on the ACCC's proposed BBM RKR to obtain these forecasts.

classes not used by the regulated services (data equipment, mobile network and terminal equipment, and customer equipment) were excluded.

Forecast direct operating expenditure was assumed to remain constant in real terms over the estimation period. To convert Telstra's average actual operating and maintenance expenditures from nominal terms to real terms,¹⁶⁹ operating expenditure in each year was indexed to 1 July 2009 prices (the base year adopted for the proposed regulatory period) using a simple average of the change in the ABS labour price index for the private communication sector and the ABS producer price index for electronic equipment and other machinery.¹⁷⁰

To forecast total direct and indirect operating expenditures, the ACCC increased forecast direct operating expenditure by 10 per cent to reflect an allocation of corporate overheads. Section 7.4 discusses the method adopted to allocate total forecast operating expenditures to asset classes.

In the September 2010 Draft Report, the ACCC proposed that the regulatory framework should provide appropriate incentives for the access provider to undertake operating expenditure that is prudent and efficient. For each price reset, the access provider would be required to provide a report that:

- compares its forecasts for the previous regulatory period with its actual operating expenditure over the period
- explains any major differences between actual and forecast expenditures in the previous period, and
- includes a detailed explanation of the information, assumptions and cost drivers used to develop its forecasts for the coming regulatory period.

The report would facilitate the ACCC's assessment of the reasonableness of the forecasts.

The ACCC stated that it did not intend to impose additional service quality mechanisms beyond those currently in place, which include the Customer Service Guarantee, the Network Reliability Framework and a number of industry codes. It considered current service quality incentives are sufficient to ensure that access seekers and end-users receive service at an adequate level. Further, given the impending changes to the access regime, the imposition of additional service quality incentives were not considered appropriate at this time.

7.2 Submissions on operating expenditure forecasts

Submissions were received on the ACCC's forecasts, its method of indexing past operating expenditures, the appropriate mark-up for indirect operating expenditures, the use of efficiency mechanisms, and service quality incentives.

7.2.1 Direct operating expenditure

Submissions by access seekers generally stated that the ACCC's forecasts in the September 2010 Draft Report were over-estimated.

¹⁶⁹ All calculations in the FLSM are undertaken in real terms (except for the tax calculations).

¹⁷⁰ Australian Bureau of Statistics, *6345.0 Labour Price Index, Australia—private communication sector* at www.abs.gov.au/ausstats/abs@.nsf/mf/6345.0 ; Australian Bureau of Statistics, *6247.0 Producer Price Index, Australia: Table 14-Electronic equipment and other machinery* at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6427.0Jun%202009?OpenDocument>.

Optus, Frontier Economics and Macquarie Telecom submitted that the ACCC's estimates of Telstra's future operating expenditure were likely to be inflated. They considered that operating expenditure over the regulatory period was unlikely to remain at the same level as the average of the past five-years due to falling demand for fixed line services and Telstra's recently announced 'Project New' which aims to reduce operating expenditure.¹⁷¹ The submissions suggested that the ACCC should base its forecasts on the most recent year's operating expenditure rather than the five-year average.

Herbert Geer submitted (on behalf of iiNet, Internode and Adam Internet) that Telstra reported in late September 2010 that it intends to cut a further 6000 staff, continuing a trend of reducing staff numbers and operating expenditure.

VHA stated that, given the transition from copper to fibre over the next few years, it is unlikely than historical levels of operating expenditure will be sustained.

Frontier Economics supported the application of the ACCC's principles for demand forecasting (set out in the September 2010 Draft Report) to expenditure forecasting. It stated that the forecasting methodology and results should be transparent and well documented. VHA also highlighted the importance of transparency around the cost inputs used to derive operating expenditure forecasts.

Telstra did not provide forecasts of direct operating expenditure for the regulatory period.

7.2.2 Indexation of past operating expenditures

Frontier Economics submitted that past operating expenditures should be indexed by the ABS telecommunications equipment import price index instead of the ABS producer price index for electronic equipment and other machinery used in the September 2010 Draft Report. Using the import price index in converting nominal expenditures to real terms would reduce real average annual operating expenditure by 1.4 per cent over the period 2005–06 to 2008–09, compared to the real increase of 7.8 per cent obtained using the ACCC's index.

7.2.3 Mark-up for indirect operating expenditures

Telstra submitted that the ACCC's 10 per cent mark-up for indirect operating costs is substantially lower than the 60 per cent mark-up applied in the Analysys model¹⁷² and significantly lower than the 108 per cent mark-up used in Telstra's TEA model.

Submissions by Macquarie Telecom and Herbert Geer (on behalf of iiNet, Internode and Adam Internet) requested more detailed explanation of the assumptions used to derive the mark-up for indirect operating expenditure and the disclosure of RAF data so interested parties could assess Telstra's actual indirect operating costs (as well as its direct operating costs).

¹⁷¹ See for example, Telstra, *Telstra details strategy as sales momentum builds*, Media Release, 29 September 2010 and Telstra, *Investor Day – Transcript*, 30 September 2010, pp. 48 and 57, both available on Telstra's website www.telstra.com.

¹⁷² The Analysys Cost Model was commissioned by the ACCC in August 2007 to estimate the cost of providing the declared fixed line services in Australia. The model was designed with specific reference to Australian conditions.

7.2.4 Efficiency mechanisms

Optus opposed the ACCC's proposed efficiency mechanisms as unnecessary stating that they were 'more likely to lead to adverse incentives to take advantage of information asymmetry than address genuine efficiency problems'.¹⁷³

AAPT and VHA submitted that Telstra will have incentives to over-estimate its operating expenditure forecasts. AAPT supported incentive mechanisms to ensure that only prudently incurred operating expenditure is included in the FLSM. VHA stated that the ACCC must provide greater detail on how it intends to apply the efficiency mechanisms.

Telstra submitted that the September 2010 Draft Report did not explain how the proposed mixture of *ex ante* and *ex post* incentive and pass through mechanisms would interact or how they would be applied over the regulatory period.

7.2.5 Service quality incentives

Optus and VHA supported the ACCC's view that service quality incentives are not required at this time. VHA submitted that such incentives may be susceptible to gaming opportunities.

7.3 ACCC's revisions to operating expenditure forecasts

On 10 November 2010, the ACCC sought additional information from Telstra on its indirect operating expenditures, including its internal forecasts and the basis for those forecasts.

In its response of 22 November 2010, Telstra provided details of direct and indirect operating expenditure incurred during 2008–09 and 2009–10 for each of the fixed line services, disaggregated by line item, in a form consistent with its RAF RKR reporting requirements. This data included operating expenditure for the WLR and LSS services that are not provided under the current RAF RKR reporting requirements. Telstra did not provide operating expenditure forecasts.

The ACCC has reviewed its forecast operating expenditure in response to submissions and the additional information provided by Telstra on 22 November 2010 and has revised its forecasts. The revised forecasts used to estimate prices for the IADs and the draft FAD prices are shown in table 7.1.

¹⁷³ Optus submission, p. 17.

Table 7.1 Comparison of September 2010 forecast operating expenditure and revised April 2011 forecasts of operating expenditure (\$m as at 1 July 2009)

	2010–11		2011–12		2012–13		2013–14		2014–15	2015–16
	Sept 2010	April 2011	Sept 2010	April 2011	Sept 2010	April 2011	Sept 2010	April 2011	April 2011	April 2011
CAN (\$m)	■	■	■	■	■	■	■	■	■	■
Core (\$m)	■	■	■	■	■	■	■	■	■	■
LSS (\$m)	■	■	■	■	■	■	■	■	■	■
Total (\$m)	■	■	■	■	■	■	■	■	■	■

On 5 April 2011, the ACCC requested from Telstra operating expenditure forecasts, if available, for the five years to 2015-16. In its 18 April 2011 response, Telstra advised that it expects total operating expenditure (excluding depreciation) to increase by ■ in 2010-11. It did not provide five year forecasts, stating that it is finalising aspects of its 2011-12 forecasts, including productivity savings.

Telstra noted that its 2010-11 forecast growth related to operating expenditure on supplying all services, excluding Sensis and international entities. It did not provide further explanation of the basis for its 2010-11 forecast.

The ACCC notes that Telstra's 2010-11 forecast is a combined growth rate for operating expenditures on providing fixed line services and other services, such as mobile services. Demand for many of the non-fixed line services are growing, in contrast to the decline in total demand for fixed line services (which partly reflects fixed to mobile substitution; see section 10.3.1). The ACCC expects that higher operating expenditure will be incurred in providing these services to meet higher demand. The growth rate in operating expenditures on these services is therefore likely to be significantly higher than the growth rate in operating expenditure related to the fixed line services. The ACCC considers that it does not have sufficient evidence to justify revising its operating expenditure forecasts for the fixed line services on the basis of Telstra's advice on 18 April 2011.

7.3.1 Direct operating expenditure

The ACCC has revised its forecasts of direct operating expenditure to take into account submissions, additional information provided since the September 2010 Draft Report, and changes to the asset classes included in the FLSM.

The CAN operating expenditure forecasts have been reduced to place greater weight on the recent declining expenditure trend in CAN expenditures. In the absence of operating expenditure forecasts by Telstra, the ACCC has accepted submissions that Telstra's most recent actual expenditure (for 2009-10) represents the best basis for forecasting future expenditure. The ACCC has assumed that direct operating expenditure in real terms will remain constant at this level over the regulatory period.

For the Core, the ACCC considers that the five-year average of recent actual expenditure in real terms remains the most appropriate basis for forecasting operating expenditure over the regulatory period. In contrast to CAN operating costs, operating expenditure on the Core network has been largely stable in real terms over recent years.

The actual direct operating expenditures on which the forecasts are based have been revised to reflect changes in the asset classes included in the FLSM, following information submitted by Telstra:

- Operating expenditure associated with the customer equipment, satellite equipment and international network cables asset classes has been removed, as these asset classes are not included in the FLSM.
- Inclusion of operating expenditure associated with asset classes added to the FLSM since the release of the September 2010 Draft Report—forecast operating expenditures on the added asset classes ‘other communications plant and equipment’, ‘network buildings and support’, ‘network land’ and ‘indirect capital assets’ have been included in forecast total operating expenditure.

On the basis of the publicly available information, Telstra’s recently announced cost cutting measures, including ‘Project New’, appear more likely to impact on indirect operating costs than direct operating costs for the network. The ACCC has adopted this assumption in determining the mark-up for indirect operating expenditures (see section 7.3.3 below).

The ACCC has not adjusted its operating expenditure forecasts to account for the planned roll-out of the NBN for three reasons. First, the remaining uncertainty about the timing of the roll-out, and de-commissioning of the copper network, prevents accurate forecasting of the magnitude of consequent expenditure reductions at this stage.¹⁷⁴ Second, the ACCC understands that Telstra will be required to provide services across the copper network for a set period after the roll-out to an area has been completed. Telstra will therefore continue to incur operating expenditure on maintaining the network during this time. Third, the method for adjusting the cost allocation factors, which effectively holds unit costs for services fairly constant (see chapter 10), ensures that any over-estimate of operating expenditures will not result in higher estimated prices.

7.3.2 Indexation of past operating expenditures

In response to Frontier Economics’ submission, the ACCC has re-considered the relevant price indexes published by the ABS that could be used to convert nominal operating expenditures to the FLSM’s base year dollars (as at 1 July 2009). The ACCC considered in more detail three indexes that measure price movements for inputs associated with providing the declared fixed line services:

- The ABS producer index for electronic equipment and other machinery used in the September 2010 Draft Report measures price changes for audio and visual receiving sets, sound reproducing and/or recording equipment, radio receiving sets

¹⁷⁴ Preliminary information on the timing of the roll-out was published in 2010. See NBNCo Limited, *NBNCo Business Case Summary*, 24 November 2010, p. 12.

television receiving sets, headphones, electronic equipment or components not elsewhere classified.¹⁷⁵

- The ABS import price index for telecommunications equipment¹⁷⁶ proposed by Frontier Economics measures price changes for imported telecommunications equipment and parts. The ABS classifies its import price indexes according to Standard International Trade Classification definitions. This means that the index for telecommunications equipment includes sound producing and recording equipment, such as microphones and turntables, as well as telecommunications equipment.
- The ABS producer price index for communication equipment manufacturing¹⁷⁷ measures price changes for materials mainly used in manufacturing data transmission equipment, such as routers or modems, or telecommunication (including telephone) data communication, receiver or transceiver equipment.¹⁷⁸

The ACCC considers that both the ABS producer index for electronic equipment and other machinery and the ABS import price index for telecommunications equipment are too broad as they include price changes for equipment that is not used to provide the declared fixed line services. The ABS producer price index for communication equipment manufacturing is likely to more closely proxy changes in the costs of materials used to provide the declared fixed line services.

The labour price index for the private communication sector¹⁷⁹ was based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 classification for communications which included postal and courier services and telecommunications services. Following a review of the ANZSIC classifications, the ABS ceased publishing the ABS labour price index for communications in July 2009 and replaced it with the ABS labour price index for information, media and telecommunications¹⁸⁰ (based on ANZSIC 2006). This classification includes workers mainly engaged in the creation and storing of information products for dissemination purposes; transmitting information products using analogue and digital signals; and providing transmission and storage services for information products.

In estimating prices for the purpose of the IADs, the ACCC indexed operating expenditures prior to July 2009 using a simple average of the ABS producer price index for communication equipment manufacturing and the ABS labour price index for communications. Since the labour price index for communications is not available from July 2009, operating expenditure for 2009-10, which are now available, has been indexed back to the base year dollars using a simple average of the ABS producer price index for communication equipment manufacturing and the ABS labour price index for information media and telecommunications.

¹⁷⁵ ABS, 1292.0 *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)* at:

¹⁷⁶ ABS, www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/D11B2B360BE1837DCA25711F00146F94

¹⁷⁷ ABS, 6427.0 *Producer Price Index, Australia: Tables 10 and 11-Communication equipment manufacturing* at www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6427.0Dec%202010.

¹⁷⁸ ABS, 1292.0 *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)* at

www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/15A91E59DCFF044BCA25711F00146F92

¹⁷⁹ ABS, 6345.0 *Labour Price Index, Australia* at www.abs.gov.au/ausstats/abs@.nsf/mf/6345.0.

¹⁸⁰ ABS, 6245.0 *Labour Price Index, Australia—information media and telecommunications* at www.abs.gov.au/AUSSTATS/abs@.nsf/mf/6345.0.

The ACCC has used this method for estimating draft FAD prices . It proposes to use the same indexation methodology in estimating final prices for the FADs.

7.3.3 Mark-up for indirect operating expenditures

The ACCC acknowledges that the 10 per cent mark-up for indirect operating expenditures used in the September 2010 Draft Report was incorrectly applied to direct operating expenditure instead of to the asset base, as applied in the Analysys model from which the mark-up was derived. The correct mark-up on direct operating expenditure consistent with the mark-up on the asset base applied in the Analysys model is 60 per cent.

The ACCC has examined the relationship between direct and indirect operating expenditure in Telstra's RAF accounts over the period 2003–04 to 2008–09. The RAF accounts show that the actual mark-up has averaged around 100 per cent during this period.

As noted in section 7.3.1 above, the ACCC has assumed that Telstra's recent and announced cost cutting measures will be concentrated on indirect operating costs. Therefore, the ACCC considers that the past actual mark-up of 100 per cent represents an upper limit for the mark-up in future. It considers the Analysys model's 60 per cent mark-up is likely to set a lower limit for two reasons. First, indirect costs have been optimised in the Analysys model. Second, Telstra's existing assets, which vary in age and technology, are likely to require greater maintenance and associated indirect costs than the new, optimised assets assumed in the Analysys model. The ACCC has therefore adopted an 80 per cent mark-up, being the mid-point of the upper and lower limits.

After total indirect operating expenditures have been calculated using this method, the forecast annual indirect operating expenditures allocated to LSS are deducted from total estimated indirect operating expenditures to ensure there is no double counting of costs. The remaining forecast indirect operating expenditures are then allocated to the other fixed line services.

7.3.4 Efficiency mechanisms

The ACCC maintains its view that efficiency incentives will promote efficient expenditure by Telstra. The ACCC considers these incentives are best provided through two mechanisms.

First, the operating expenditure forecasts included in the FLSM for estimating access prices should represent an expected efficient level of expenditure. While the ACCC recognises that Telstra has incentives to overstate its required expenditures, it considers that Telstra's scope to significantly inflate its projected operating expenditures over the regulatory period will be reduced by requiring Telstra to:

- provide a detailed explanation of the information, assumptions and cost drivers used to develop its forecasts for the coming regulatory period. The ACCC will publish the explanation during the consultation process for the price reset, and
- explain any significant differences between its forecasts for the previous regulatory period and its actual operating expenditure over the period.

Second, the ACCC proposes to adopt an efficiency benefit sharing scheme, similar to the schemes used by the AER in regulating electricity distribution and transmission

providers. Section 6.2.5 of this discussion paper set out an explanation of these schemes.

As noted in that section (in the context of capital expenditure), it is important that the operating expenditure forecasts used in the FLSM represent an efficient level of expenditure. This is necessary to ensure that this type of efficiency benefit sharing scheme works effectively. The ACCC considers that sufficient transparency in the information supporting the forecasts and careful scrutiny during the consultation process for the price reset will maximise the likelihood that the forecasts will not include significant inefficiencies or inflated costs.

7.3.5 Service quality incentives

The ACCC maintains its view that the current service quality mechanisms are sufficient to ensure that access seekers and end-users receive service at an adequate level.

The ACCC is consulting on the non-price terms and conditions that should be included in FADs. Part B of this discussion paper discusses the issues identified by the ACCC. Some non-price terms and conditions are likely to impact on the level of services received by access seekers and end-users.

7.4 Allocation of operating expenditure to asset classes

Total forecast operating expenditure must be allocated to asset classes in the FLSM.

7.4.1 September 2010 Draft Report allocations to asset classes

The ACCC identified three alternative methods for allocating total operating expenditure to asset classes in the FLSM, namely:

- allocating operating expenditure to each asset class according to its share of the total depreciated asset value (that is, the RAB) for each year
- allocating operating expenditure to each asset class according to its share of the total undepreciated asset value for that year, or
- using the allocations in the RAF and assuming they remain constant over the estimation period.

The ACCC concluded that the second method was preferred for several reasons:

- The first method would allocate very little operating expenditure to assets that are almost fully depreciated. It is unrealistic to expect that an asset's operating costs will decline over its life.
- The second method allows for a more uniform allocation of operating costs to assets and is simple and transparent.
- The third method results in a broadly similar allocation of operating costs to asset classes as the second method, but is less transparent. While the RAF allocation method produced a more realistic allocation of operating costs between ducts and pipes and copper cables, the ACCC considered that there would be minimal impact on the overall allocation of operating expenditure because the CAN services (ULLS, WLR and Telstra's retail services) use ducts and pipes and copper cables in similar proportions.

The method used to allocate total operating expenditure to asset classes differs from the cost allocation factor methodology used to allocate the revenue requirements associated with each asset class to particular services. Specifically the operating expenditure allocations are not adjusted for changes in demand.

7.4.2 Submissions on allocations to asset classes

Frontier Economics agreed ‘that the method used by the ACCC is preferable, as the alternative method will allocate more Opex to newer, less depreciated assets. That is contrary to how it would be expected Opex would be being spent’.¹⁸¹

7.4.3 ACCC response

In estimating prices for the IADs, the ACCC maintained the allocation method adopted in the September 2010 Draft Report. The allocations of operating expenditure were adjusted to reflect changes in the asset classes included in the FLSM.¹⁸² This method was also used in estimating draft FAD prices.

The ACCC proposes to use this allocation methodology in estimating final prices for the FADs. The ACCC may reconsider its approach if it receives information from Telstra on its forecast operating expenditures by asset class.

Tables 7.2 and 7.3 set out the operating costs allocated to each asset class in estimating prices for the IADs and draft FAD prices.

¹⁸¹ Frontier Economics submission to the ACCC’s *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, October 2010, (Frontier Economics submission), p. 12.

¹⁸² The undepreciated value of the ‘ducts and pipes’ asset class obtained from Telstra’s asset register has not been adjusted for the increment of \$1.44 billion made to the depreciated value of the ‘ducts and pipes’ asset class used in determining the initial RAB value.

Table 7.2: Allocation of operating expenditure by CAN asset class (\$m at 1 July 2009)

CAN	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Ducts and pipes	█	█	█	█	█	█
Copper cables	█	█	█	█	█	█
Other cables	█	█	█	█	█	█
Pair gain systems	█	█	█	█	█	█
Radio CAN	█	█	█	█	█	█
Other CAN assets	█	█	█	█	█	█
Other communications plant & equipment	█	█	█	█	█	█
Network land	█	█	█	█	█	█
Network buildings/support	█	█	█	█	█	█
Total CAN assets	█	█	█	█	█	█

Table 7.3: Allocation of operating expenditure by Core asset class (\$m at 1 July 2009)

Core	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Switching equipment - Local	█	█	█	█	█	█
Switching equipment - Trunk	█	█	█	█	█	█
Switching equipment - Other	█	█	█	█	█	█
Inter-exchange cables	█	█	█	█	█	█
Transmission equipment	█	█	█	█	█	█
Radio bearer equipment	█	█	█	█	█	█
Other communications plant & equipment	█	█	█	█	█	█
Network land	█	█	█	█	█	█
Network buildings/support	█	█	█	█	█	█
LSS equipment	█	█	█	█	█	█
Total Core assets	█	█	█	█	█	█

8 Calculating tax payments

Key points

- The FLSM applies a post-tax BBM framework where tax forms a separate building block component of the revenue requirement.
- The assessment of tax in the FLSM follows the conventional accounting treatment of tax as it applies the corporate tax rate to profits where profits are defined as revenue minus costs.
- In the FLSM, tax payable is calculated in nominal terms.
- Tax depreciation is calculated using the straight-line method.
- Regulatory and tax depreciation can be different due to the effects of accelerated tax depreciation applicable under Australian tax rules.

To estimate prices for the declared fixed line services, the ACCC has adopted a post-tax BBM where tax forms a separate building block component of the revenue requirement. Tax liabilities form a separate cost block because the access provider requires sufficient revenue to meet its tax expenses as well as its operating costs and the costs associated with its return on and of capital.

This chapter explains the ACCC's method of calculating the tax liabilities included in Telstra's estimated revenue requirement for supplying the declared fixed line services.

8.1 *Calculation of tax in the September 2010 Draft Report*

The calculation of tax in the FLSM follows the conventional accounting treatment of tax as it applies the corporate tax rate to profits where profits are defined as revenue minus costs. The tax assessable profit under the building block approach is calculated as the pre-tax revenue requirement minus the three classes of tax deductible expenses – operating costs, tax depreciation and interest.

In contrast to the rest of the FLSM where calculations are undertaken in real terms, tax payable is calculated in nominal terms because tax liabilities are based on nominal values. Tax is assessed on nominal (not real) profits generated throughout each year and the magnitude of the tax deduction arising from interest expenses depends on the nominal interest rate, not the real interest rate. Tax depreciation and operating costs are also calculated in nominal terms for the purposes of assessing tax payable.

Consequently, the tax calculations in the FLSM are performed in nominal terms and then converted into the base year prices and added to the real pre-tax revenue requirement to calculate the real revenue requirement including tax (see figure 4.2 in chapter 4).

Tax depreciation is a tax deductible expense in assessing the amount of tax payable.

Straight line depreciation has been applied to calculate tax depreciation. Straight-line depreciation involves dividing the initial asset value by the asset's useful life to calculate a constant depreciation expense each year. Using straight line depreciation complies with Australian tax rules and accepted conventions that favour the simplicity and transparency of the straight line method for tax purposes.

Tax depreciation can differ from regulatory depreciation because the Australian tax rules allow companies to write off the value of capital expenditures (through accelerated depreciation) faster than regulatory depreciation. A consequence of accelerated depreciation is that the long term effective tax rate is typically significantly lower than the corporate tax rate. Accelerated depreciation is incorporated into the FLSM by varying the asset life for tax purposes for assets eligible for accelerated depreciation. The FLSM does not currently include any assets subject to accelerated tax depreciation.

8.2 Submissions on tax calculation method

Telstra submitted that the FLSM understates the effective tax rate because for some assets the FLSM does not calculate the cash flows of an asset's total remaining life, resulting in over-estimation of post-tax returns. If an asset's remaining life exceeds the FLSM's maximum estimation length of 12 years, a terminal value calculated as 60 per cent of the asset's residual value in the final year of the model is used.¹⁸³ Telstra considered that this method ignores tax liabilities beyond the 12 year life of the model, overstates post-tax cash flows and ultimately understates the effective tax rate.

In addition, Telstra submitted that because its tax depreciation has been accelerated relative to accounting depreciation, the tax written down value of its assets is lower than the assets' accounting written down value. Telstra suggested this means that the ACCC has inadequately compensated Telstra for its tax expenses; however, Telstra stated that it was investigating the materiality of the impact.

8.3 ACCC view

The effective tax rate is not used to determine the tax building block in a post-tax revenue model. In a post-tax framework, the effective tax rate has two purposes.

Telstra's submission indicates a misunderstanding of the methodology for calculating tax liabilities in a post-tax model in contrast to a pre-tax revenue model:

- In a pre-tax revenue model, the effective tax rate is used to calculate the required tax compensation. The effective tax rate is added to the return on equity to calculate the pre-tax return that is required by equity holders. This pre-tax return is sufficient to compensate equity-holders for the business and financial risks borne as well as the return required to compensate for tax liabilities.
- In the FLSM's post-tax approach, tax liabilities are calculated directly. The effective tax rate is not an input into the calculation of the regulated business' tax liabilities.

The ACCC has investigated Telstra's claims that the FLSM's maximum estimation period of 12 years leads to an error in the calculation of tax liabilities. Telstra claimed, in its submission to the September 2010 Draft Report, that the FLSM and the AER's PTRM would produce different estimates of its tax liabilities as a result of the claimed error. The ACCC notes that the two models are not directly comparable as they have

¹⁸³ Debt holders and equity holders receive different cash flows in the FLSM. The effective tax rate for debt is set at the corporate tax rate by default and does not affect the output of the FLSM. The calculation of the effective tax rate applicable to equity relies on apportioning the terminal value of pre and post-tax cash flows to equity holders by applying the benchmark equity/debt gearing ratio factor of 60 per cent.

been designed to reflect different industry circumstances. Consequently the FLSM's outputs cannot be replicated by the PTRM (see further discussion of the differences between the FLSM and PTRM in section 4.3.3). The ACCC confirms that the tax calculation method adopted by each model is equally valid.

The ACCC notes that, in any case, it is not necessary to estimate the long-term effective tax rate as it will be recalculated at each price reset so that the correct tax compensation will be provided within each regulatory period.

Since the September 2010 Draft Report, the ACCC has revised the method used in the FLSM to calculate cash flows and the effective tax rate. The calculations are now undertaken for the duration of the regulatory period, not for the maximum 12 year life of the model. The effective tax rate calculated in the FLSM therefore applies only to the relevant regulatory period. The ACCC considers that the revised method will avoid confusion over the applicability of the calculated effective tax rate beyond the regulatory period. In addition, it is likely to be more reliable than the previous method, which required the input of assumptions about operating and capital expenditure beyond the regulatory period.

Inflation has an impact on the effective tax rate calculation¹⁸⁴ by reducing the effective tax rate below the corporate tax rate of 30 per cent. This occurs because a portion of an investor's return comes from the appreciation of the asset base. Part of this asset base is not taxed; hence the effective tax rate calculated in the FLSM is less than the corporate tax rate used in the FLSM.

In regard to any difference between the tax written down value of its assets and the assets' accounting written down value, the Australian Energy Market Commission (AEMC) has stated that 'the difference in approaches to valuing initial tax assets would in most cases not lead to a difference in the estimated cost of corporate income tax.'¹⁸⁵ The ACCC therefore proposes to adopt the standard regulatory approach of setting the initial tax asset value equal to the regulatory asset value. This approach has been adopted in the AER's PTRM, by the Victorian Essential Services Commission and by the AEMC in its 2006 Rule Determination.

¹⁸⁴
$$\tau_E = 1 - \frac{IRR_{post-tax}}{IRR_{pre-tax}}$$

¹⁸⁵ AEMC, *Rule Determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, p. 90.

9 Summary of the estimated revenue requirement

The FLSM calculates the aggregate revenue required by Telstra to recover its costs of supplying all services provided using the PSTN. As such, the aggregate revenue requirement calculated in the FLSM includes the estimated costs incurred in providing the declared fixed line services, other declared services that use the PSTN (such as the DTCS and MTAS), and non-regulated services provided using the PSTN, such as Telstra's retail fixed line services, wholesale ADSL, and some transmission and mobile services. The allocation of appropriate shares of the aggregate revenue requirement to specific declared fixed line services is discussed in chapter 10.

The aggregate revenue requirement is calculated according to the following formula:

$$RR_t = E(OPEX_t) + (RAB_{t-1} * WACC) + E(DEP_t) + E(TAX_t)$$

where RR_t = the aggregate revenue requirement for the year

$E(OPEX_t)$ = the forecast operating expenditure for the year

RAB_{t-1} = the RAB at the beginning of the year, which equals the closing value of the RAB for the previous year

WACC = the regulatory WACC, which is multiplied by the RAB to calculate the required return on capital for the year

$E(DEP_t)$ = the forecast depreciation expensed for the period, which represents the return of capital for the year

$E(TAX_t)$ = the tax liabilities forecast to be incurred during the year

The methodology and assumptions used to estimate each cost block were discussed in chapters 4–8 of this discussion paper. The table below summarises the resulting aggregate revenue requirement for each year (in real terms) and the inputs used.

Table 9.1: Aggregate revenue requirement (in \$m as at 1 July 2009)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Operating expenditure (\$m)	█	█	█	█	█	█
Return on capital (RAB*WACC) (\$m)	█	█	█	█	█	█
Return of capital (regulatory depreciation) (\$m)	█	█	█	█	█	█
Tax payments (\$m)	█	█	█	█	█	█
Estimated revenue requirement (\$m)	█	█	█	█	█	█

The aggregate revenue requirement shown in table 9.1 represents the estimated total revenue required to recoup the costs of providing all the services that use CAN and Core assets included in the RAB. To determine the revenue required to provide specific services, the aggregate revenue requirement must be allocated to the different services sharing the use of the network assets. The ACCC has applied the cost allocation factors discussed in chapter 10 to estimate the share of the total revenue

requirement attributed to specific services. The revenue requirements allocated to each service are shown in table 9.2 below.

Table 9.2 Revenue requirement allocated to services (in \$m as at 1 July 2009)
 [numbers in table are c-i-c]

			2010–11	2011–12	2012–13	2013–14	2014–15	2015–16
Declared fixed line services	ULLS	Operating expenditure	■	■	■	■	■	■
		Return on capital	■	■	■	■	■	■
		Return of capital	■	■	■	■	■	■
		Tax payments	■	■	■	■	■	■
		Total	■	■	■	■	■	■
	WLR	Operating expenditure	■	■	■	■	■	■
		Return on capital	■	■	■	■	■	■
		Return of capital	■	■	■	■	■	■
		Tax payments	■	■	■	■	■	■
		Total	■	■	■	■	■	■
	PSTN OTA	Operating expenditure	■	■	■	■	■	■
		Return on capital	■	■	■	■	■	■
		Return of capital	■	■	■	■	■	■
		Tax payments	■	■	■	■	■	■
		Total	■	■	■	■	■	■
	LCS	Operating expenditure	■	■	■	■	■	■
		Return on capital	■	■	■	■	■	■
		Return of capital	■	■	■	■	■	■
		Tax payments	■	■	■	■	■	■
		Total	■	■	■	■	■	■
	LSS	Operating expenditure	■	■	■	■	■	■
		Return on capital	■	■	■	■	■	■
		Return of capital	■	■	■	■	■	■
		Tax payments	■	■	■	■	■	■
Total		■	■	■	■	■	■	
Total revenue requirement allocated to declared fixed line services			■	■	■	■	■	■
Other regulated and unregulated services	Operating expenditure		■	■	■	■	■	■
	Return on capital		■	■	■	■	■	■
	Return of capital		■	■	■	■	■	■
	Tax payments		■	■	■	■	■	■
	Total		■	■	■	■	■	■
Total			■	■	■	■	■	■

10 Cost allocation factors

Key points

- Since the September 2010 Draft Report, the ACCC has made a number of adjustments to the cost allocation factors used in the FLSM.
- The cost allocation factors used to allocate the costs of the ‘ducts and pipes’ and ‘copper cables’ asset classes to the ULLS and WLR service are now adjusted for the differential costs of providing those services in the four geographic bands.
- Cost allocation factors have been developed for new asset classes added to the FLSM. The new asset classes are: ‘network land’, ‘network buildings and support’, ‘indirect capital assets’ and ‘other communications plant and equipment’.
- Adjustments have been made to other cost allocation factors as a result of better and updated information.
- The ACCC does not accept that the cost allocation factors for the declared fixed line services should be adjusted to reflect declining total demand for fixed line services. The ACCC considers that the risk premium included in the WACC appropriately compensates Telstra for the commercial risks associated with reduced customer demand and loss of market share.
- The ACCC’s methodology for adjusting the cost allocation factors to reflect forecast changes in demand will generally offset any demand forecasting errors, including those related to customer migration to the NBN.

As noted in chapter 9, the FLSM calculates the total costs of supplying all the services provided using the CAN and Core assets included in the FLSM. These costs form the aggregate revenue requirement for a broad range of services provided across the PSTN, including the six declared fixed line services.

To calculate the revenue to be recovered from each of the declared fixed line services, an appropriate share of the aggregate revenue requirement must be allocated to each of these services. Chapter 9 sets out the revenue requirements allocated to each of these services.

Each service’s share of the aggregate revenue requirement is calculated by applying cost allocation factors to the total operating, capital and tax costs associated with each of the asset classes in the FLSM. The cost allocation factors represent the share of costs incurred in supplying a particular service. This chapter describes how the cost allocation factors used in the FLSM are determined.

10.1 *September 2010 Draft Report cost allocation factors*

The September 2010 Draft Report used the cost allocation factors in the Analysys Cost Model as a starting point for deriving the cost allocation factors applied in the FLSM.

The Analysys cost allocation factors are derived from demand data for individual services combined with routing factors to determine the percentage of assets used by

each particular service. The routing factors were derived from industry and engineering best practice scenarios and reflect the use of assets by each individual service in 2007–08 when the Analysys model was developed, updated in 2009 for Analysys’ estimates of 2008–09 service demands.

Following the release of the September 2010 Draft Report, the ACCC made a redacted version of the Analysys model available on its website.¹⁸⁶ The unredacted version of the model was made available to interested parties that concluded confidentiality arrangements with Telstra. The ACCC consulted on the Analysys model during its development. The September 2010 Draft Report included a detailed explanation of how the Analysys cost allocation factors are derived.

The ACCC made several adjustments to the Analysys cost allocation factors in deriving the cost allocation factors used in the FLSM. Adjustments were made to remove, as far as possible, the effects of the optimisation undertaken in the Analysys model to ensure that the cost allocation factors used in the FLSM are compatible with the actual cost data used to model prices.

The Analysys factors were also adjusted for changes in service demand levels since the Analysys model was developed to ensure that the factors used in the FLSM reflect current usage patterns. To ensure the cost allocation factors continue to accurately reflect a service’s usage of assets over time, the adjusted factors used in the FLSM are modified each year to reflect forecast changes in demand.

Section 10.3 below explains in detail the ACCC’s methodology for revising each of the cost allocation factors adopted in the September 2010 Draft Report and the modifications made in its methodology in estimating prices for the IADs.

10.2 Submissions on cost allocation factors

Submissions generally commented that the cost allocation factors used in the September 2010 Draft Report were not sufficiently justified and that greater transparency was needed.

10.2.1 Demand adjustments

Telstra submitted that the ACCC’s cost allocation methodology is incorrect because it does not account for changes in total demand for fixed line services. Telstra stated that the ACCC has implicitly assumed that the total demand for fixed lines services will remain unchanged over the regulatory period. In making this assumption, Telstra considered the ACCC has ignored recent declines in the total number of SIOs and expectations that total demand for fixed line services will continue to decline. As a consequence of this approach, the cost allocation factors used in the FLSM will prevent Telstra from recovering a significant proportion of its costs of supplying fixed line service.

Telstra argued that as demand for the fixed line services falls, for example due to migrations to the NBN, prices should be increased to ensure that costs are recovered over the remaining services.

¹⁸⁶ See <http://www.accc.gov.au/content/index.phtml/itemId/889101>.

Telstra also submitted that any errors in the ACCC's demand forecasts could result in inappropriate cost allocation factors that do not accurately allocate costs to services.¹⁸⁷ It stated that, given the likely impact of the NBN roll-out on the demand for fixed line services, the production of highly robust demand forecasts beyond 2011–12 is unlikely to be possible.

10.2.2 ULLS and WLR—'ducts and pipes' and 'copper cables'

Optus submitted that the equal unit cost assumption for 'ducts and pipes' and 'copper cables' across the geographic bands is incorrect and 'creates a significant distortion between the interaction of the de-averaged pricing for the ULLS and the averaged pricing for Wholesale Line Rental and Telstra's Retail Line Rental pricing'¹⁸⁸ (see chapter 11). Optus stated that the distortion introduced by this assumption results in ULLS access seekers and their customers bearing more than their fair share of Telstra's network costs, creating a substantial 'anti-competitive cross-subsidy from access seekers to Telstra of \$84 million annually'.¹⁸⁹

10.2.3 ULLS—CAN 'other assets'

Optus submitted that there is an error in the cost allocation factor for ULLS applied to 'other assets' in 2010–11, due to the ACCC applying the cost allocation factor for 2011–12.

10.2.4 PSTN OTA—'switching equipment'

Optus submitted that the switching cost allocation factors applied for PSTN OTA do not account of changes in forecast demand.

Frontier Economics (on behalf of the CCC) questioned the ACCC's calculations of the Analysys cost allocation factors for PSTN OTA, stating that the Analysys factors for 'PSTN outgoing traffic to international destinations' and 'PSTN outgoing to mobile traffic' should be excluded. It also considered the ACCC's 'de-optimisation' adjustment arbitrary. It stated that switching equipment costs should be reduced directly.

Telstra stated that the ACCC's reasoning for adjusting the cost allocation factors for local switching incorrectly assumes that switching costs have fallen in line with the reduction in PSTN OTA demand since 2002-03. It rejected this assumption. It stated that depreciation has not been fully recovered on these assets and on-going operating and maintenance costs are incurred to support the assets' continued use.

Telstra considered that the ACCC's methodology would result in the stranding of a significant proportion of local switching assets. It proposed that the ACCC should follow an approach similar to that adopted in chapter 6A of the National Electricity Rules for the removal of assets from the regulatory asset base.

¹⁸⁷ Telstra did not include comments on the cost allocation factors in its October 2010 submission. Comments were provided in a supplementary submission in November 2010. Telstra, *Pricing principles for fixed line services, supplementary response to the ACCC's Draft Report*, November 2010.

¹⁸⁸ Optus, *Optus submission to Australian Competition and Consumer Commission in response to the Draft Report Telecommunications Access Pricing Principles for Fixed Line Services*, October 2010, p. 3.

¹⁸⁹ *ibid.*, pp. 30.

10.2.5 PSTN OTA—‘transmission equipment’

Frontier Economics submitted that the Analysys ‘transmission equipment’ cost allocation factors for PSTN OTA may allocate to PSTN OTA some transmission costs that should be allocated to Telstra’s retail services. It also stated that the ACCC’s adjustment to the cost allocation factor contains a calculation error relating to the percentage share of PSTN voice traffic to total traffic. It further submitted that the ACCC’s adjustment was based on an unrealistic assumption that forecast increases in data traffic would correspond in magnitude to the ACCC’s forecast declines in PSTN OTA voice traffic.

Optus considered the ‘transmission equipment’ allocation factors did not take account of forecast demand changes.

Telstra submitted that it was unable to replicate the ACCC’s calculations underlying its adjustments to the costs allocation factors for transmission equipment. It considered that the ACCC had not provided sufficient explanation of the method used to calculate the allocators after 2009–10.

10.2.6 PSTN OTA and LCS—‘inter-exchange cables’

Frontier Economics submitted that the cost allocation factors for ‘inter-exchange cables’ should be adjusted for increased data traffic since these cables are used to provide voice (PSTN OTA and LCS) and data services. It questioned why costs associated with ‘international network cables’ were allocated to PSTN OTA and LCS.

10.2.7 Allocation factors for ‘network land’ and ‘network buildings and support’ asset classes

Telstra submitted that, in using cost allocation factors derived from the Analysys model, incorrect allocation factors have been applied to network land, buildings and support assets in the FLSM. This occurs because these assets are included within broader asset classes in the RAF accounts. Telstra stated that, because of this, the ACCC applied the Analysys cost allocation factors relating to the broad asset classes rather than developing separate cost allocation factors for the different assets included within those broad asset classes.

In November 2010, the ACCC asked Telstra to identify the specific RAF asset classes that include network land, buildings and support assets and, where these costs are included in a broader asset category, to identify its share (in dollars or percentage terms). This information was provided by Telstra on 22 November 2010.

10.3 ACCC revisions to cost allocation factors

The ACCC maintains its view that the Analysys cost allocation factors provide a good starting point for determining allocation factors in the FLSM, where they are available. To provide greater transparency about the ACCC’s methodology for adjusting the Analysys factors, and for calculating alternative factors where the Analysys factors are not available or not appropriate, the ACCC has added an additional worksheet to the FLSM. This worksheet (‘E. Allocation factors calc’ worksheet) shows the calculations undertaken to obtain the cost allocation factors used in estimating prices.

Following the release of the September 2010 Draft Report, the ACCC identified an error in the initial Analysys cost allocation factors used in the FLSM. The cost allocation factors used in the model released with the September 2010 Draft Report were for 2009–10. The 2008–09 factors should have been used for consistency with the base year in the FLSM, which commences on 1 July 2009. The ACCC has therefore revised the starting point cost allocation factors to use the 2008–09 factors.

The starting point cost allocation factors were then adjusted by changes in forecast demand in subsequent years to reflect changing asset usage. These adjustments used the ACCC's revised forecasts of demand for the fixed line services, set out in chapter 13.

The inclusion of additional asset classes in the FLSM has required the development of cost allocation factors for those new asset classes. Where Analysys cost allocation factors were not available for the added asset classes, the ACCC has developed cost allocation factors (see sections 10.3.8, 10.3.9 and 10.3.10 below).

Cost allocation factors are no longer included for 'international network cables' and 'satellite equipment'. In November 2010, Telstra provided information that these asset classes are not used to provide the declared fixed line services.

The rest of this section sets out the ACCC's view on the appropriate methodology for developing cost allocation factors for the fixed line services, including modifications to its methodology since the release of the September 2010 Draft Report.

10.3.1 Demand adjustments

The ACCC does not accept Telstra's view that the cost allocation factors for the declared fixed line services should be adjusted to reflect declining total demand for the fixed line services. This view would mean that as total demand fell, the costs of the network would be recouped from a smaller number of remaining services. Adopting this approach would increase the unit costs of providing all services, including services like the ULLS, where demand has been growing strongly.

There are a number of reasons for the recent declining trend in traffic Telstra's PSTN. These reasons include growth in access seekers' own networks, which has resulted in reduced demand for wholesale services like WLR, LCS and PSTN OTA. Another reason is competition by access seekers, which has reduced Telstra's retail market share. Much of the fall in total demand for fixed line services reflects reduced demand for Telstra's retail services. A further factor has been fixed to mobile substitution, which has decreased the fixed line services market.

The ACCC does not consider it is appropriate to compensate Telstra for a loss of market share. The ACCC also rejects the view that prices should be increased in line with reduced demand due to consumers choosing alternative products (such as mobile services). It considers that Telstra has been appropriately compensated for its business risks through the risk premium included in the commercial rate of return provided by the WACC.

Telstra also raised concerns regarding the impact of demand forecasting errors on the cost allocation factors. In particular, migrations to the NBN will reduce the demand for Telstra's services. In the September 2010 Draft Report, the ACCC noted that its demand forecasts did not take into account demand reductions caused by migration of customers from the copper network to the NBN. The ACCC did not have sufficient

information at the time of that report to incorporate any such demand changes into its forecasts.

To date, the ACCC has not received sufficiently detailed or certain information on the planned migration timetable to adjust its demand forecasts for migration to the NBN. Should better information become available about the magnitude and timing of the migration process prior to finalising prices for the FADs, the ACCC may adjust its demand forecasts and cost allocation factors.

However, the ACCC notes that its methodology for adjusting the cost allocation factors to reflect forecast changes in demand will generally offset any demand forecasting errors. The cost allocation adjustment methodology effectively holds fairly constant the share of costs allocated to each unit of service (that is, by SIO for ULLS and WLR, and by minute of traffic for LCS and PSTN OTA).

This means that if demand for one of the declared fixed line services increases, its total share of costs will increase to reflect the service's higher usage of the assets required to provide the service. But the unit cost of the service—that is, the total cost (or revenue requirement) allocated to the service divided by the number of units of service demanded—will remain constant (assuming supply costs have not changed). Similarly, if demand falls, the unit cost of the service will not change.

The estimated unit cost for each of the declared fixed line services will change as a result of changes in operating and capital costs. But estimated unit costs will not change significantly as a result of changes in demand alone. Consequently, demand changes will not alter estimated prices to any significant degree.

The exception is the LSS where the total costs of providing LSS-specific services are, to a large degree, invariant with the number of services provided. Therefore demand increases will reduce unit costs due to economies of scale (and vice versa).

Since the ACCC's cost allocation adjustment methodology effectively holds unit costs constant, differences between actual and forecast demand will not imply that access prices were set either too high or too low. Prices are set to reflect unit costs which will not change as a result of demand changes alone. Migrations to the NBN that cause actual demand to differ from the ACCC's demand forecasts will not, therefore, require any adjustments to access prices.

10.3.2 ULLS and WLR—'ducts and pipes' and 'copper cables'

The ACCC recognises that the cost allocation factors for ULLS and WLR in the September 2010 Draft Report overstated estimated ULLS costs relative to WLR and Telstra's retail costs.

The ACCC has developed a methodology to adjust the allocation of costs to ULLS, WLR and other services (mainly Telstra's retail services) to reflect the differential costs of providing services in the different geographic bands. A detailed description of the geographic cost calculation method is provided in chapter 11.

After the costs of supplying services in each band are estimated, the cost allocation factors for the two asset classes 'ducts and pipes' and 'copper cables' are adjusted to reflect geographic cost differentials in supplying ULLS and WLR.

To calculate the geographically-adjusted cost allocation factor for 'ducts and pipes' for ULLS, the total 'ducts and pipes' cost of supplying ULLS is calculated by weighting the estimated 'ducts and pipes' costs per band by the number of ULLS

SIOs in each band. The total ‘ducts and pipes’ cost for ULLS is then divided by the total ‘ducts and pipes’ cost of supplying all services (that is, ULLS, WLR and Telstra’s retail services) to obtain the cost allocation factor.

A similar process is undertaken to obtain the geographically-adjusted ‘copper cables’ cost allocation factor for ULLS and the geographically-adjusted ‘ducts and pipes’ and ‘copper cables’ cost allocation factor for WLR.

10.3.3 ULLS—CAN ‘other assets’

The ACCC has corrected an error identified by Optus (see section 10.2.3 above) in the 2010–11 cost allocation factor for ULLS applied to ‘other assets’ in September 2010 Draft Report. The correction of the error has reduced ULLS and WLR prices slightly.

10.3.4 PSTN OTA—‘switching equipment’

In the September 2010 Draft Report, the ACCC noted that the capacity of the switching equipment in the Core network is significantly higher than the current level of traffic. Total voice traffic using Telstra’s switching equipment peaked in 2002–03 and has fallen since then, with a larger decline in PSTN OTA traffic. The fall in voice traffic over the PSTN reflects a loss of market share by Telstra to competing carriers that have invested in their own switching equipment as well as a switch by end-users to alternative technologies such as mobiles.

The ACCC maintains its view that switching equipment has been over-provisioned for current voice traffic levels. Since there cannot be any over-provisioning in the optimised Analysys model, the Analysys cost allocation factors would have been determined in respect of a smaller, cheaper amount of switching equipment than the equipment actually in place.

The ACCC has adjusted the Analysys cost allocation factors for the three classes of switching equipment (local, trunk and other) to ensure that unit costs per minute are not inflated by the loss of traffic on the switching equipment. Telstra’s investment in switching capacity was a commercial decision based on past voice traffic and Telstra’s forecasts of future demand. It received compensation for the risk of a fall in demand through the commercial rate of return earned on assets. For PSTN OTA, a commercial rate of return was provided through the WACC.

The ACCC considers that Telstra should not be permitted to spread the costs of its switching equipment over its remaining customers, particularly since the switching equipment is, to a large extent, a natural monopoly.¹⁹⁰

For local switching equipment, the adjustment involves using the total peak voice traffic volume in 2002–03 as the denominator each year and the forecast demand for PSTN OTA as the numerator to calculate the cost allocation factor. Since the September 2010 Draft Report, the cost allocation factors have been revised to use actual 2009–10 PSTN OTA traffic, from Telstra’s RAF usage report. The factors have also been revised in subsequent years for changes in the ACCC’s demand forecasts.

For trunk and other switching equipment, the adjustment process ensures that the routing factors built into the Analysys cost allocation factors are retained. To do so, the ACCC has maintained the relativity between the 2009–10 Analysys factors for

¹⁹⁰ Access seekers, whose customers (end-users) call a number on the Telstra network, cannot avoid pay terminating access charges to Telstra for the use of its network.

trunk and other switching equipment and the factor for local switching equipment. This was achieved by dividing the adjusted local switching cost allocation factor by the unadjusted cost allocation factor from the Analysys model to derive a scaling factor. The unadjusted cost allocation factors for trunk and other switching equipment were then multiplied by the scaling factor to obtain the adjusted cost allocation factors for those asset classes.

In deriving the starting point cost allocation factors for PSTN OTA from the Analysys model, the ACCC has revised its previous calculations to exclude costs for 'PSTN outgoing traffic to international destinations' and 'PSTN outgoing to mobile traffic'. These costs do not relate to PSTN OTA.

10.3.5 LCS—'switching equipment'

In the September 2010 Draft Report, the ACCC stated that it had considered whether to make a similar adjustment to the 'switching equipment' cost allocation factors for the LCS. Since the share of switching equipment allocated to LCS is relatively low, the ACCC considered that any adjustment to the factors would be minor. On that basis, the ACCC concluded that no adjustment would be made.

Since no submitters objected to this approach, the ACCC maintains its previous conclusion.

10.3.6 PSTN OTA—'transmission equipment'

Since the Analysys model was developed in 2007–08 based on demand patterns at the time, the 'transmission equipment' cost allocation factor for PSTN OTA did not reflect the exponential growth in data traffic since that time. At the same time, voice traffic has declined.

To cater for the significant increase in data traffic over recent years, Telstra has invested in expanding the capacity of its transmission equipment. The ACCC considers that these investment costs should not be allocated to voice traffic, including PSTN OTA.

The ACCC has therefore adjusted the 'transmission equipment' cost allocation factor to reflect the share of the asset used to provide the PSTN OTA service, compared to data services and other voice services. To make the adjustment, the ACCC forecasts total PSTN traffic (voice and data) and PSTN OTA traffic. Forecast declines in the share of PSTN OTA in total transmission traffic are used to adjust the Analysys cost allocation factor.¹⁹¹

The ACCC has revised the measure used to estimate total PSTN data traffic. The packet switched data product (reported in Telstra's RAF) was used in the September 2010 Draft Report to measure data traffic. This measure was found to exclude a substantial amount of internet data traffic. Telstra is not required to report total data traffic in its RAF accounts.

To develop an estimate of actual data traffic in 2008-09 and 2009–10, the ACCC has used ABS internet activity statistics¹⁹² on the volume of data downloaded by dial-up

¹⁹¹ The adjustment retains the routing information contained within the Analysys factors by maintaining the relativity between the cost allocation factors for voice and data services. Data services use the transmission equipment more intensively than voice traffic.

¹⁹² ABS, Cat. No. 8153.0 - Internet Activity, Australia, June 2010.

and fixed line broadband users during the December 2008, June 2009, December 2009 and June 2010 quarters. Three qualifications on using this measure of total data traffic should be noted:

- The ABS measure of data traffic includes all traffic carried by internet service providers (ISPs) with more than 1,000 subscribers. Not all of this traffic will be carried via Telstra's transmission equipment as some ISPs use their own transmission equipment or purchase transmission services from carriers other than Telstra.
- The measure of data traffic includes ISDN voice and data calls. The ACCC has added this traffic to Telstra's voice traffic on the PSTN in its RAF accounts to estimate total voice and data traffic. There may therefore be some double counting of ISDN data traffic.
- The measure of data traffic excludes commercial traffic, such as banking data, that is not carried by an external ISP but may be carried via Telstra's transmission equipment.

The first and second factors will cause the ACCC's estimate of total voice and data traffic to overstate total traffic on Telstra's transmission equipment. The third factor will partly offset the over-estimation caused by the first two factors. The ACCC does not have access to information to allow it to obtain a more accurate estimate of data traffic on Telstra's transmission equipment. The ACCC has assumed that 75 per cent of the ABS estimate of total data traffic was carried on Telstra's transmission equipment.

In its December 2010 publication the ABS substantially revised upwards its estimates of total data traffic for the December 2009 quarter from 113,704 Terabytes to 127,954 Terabytes and the June 2010 quarter from 142,172 Terabytes to 155,503 Terabytes. The effect of this revision is to reduce the 2009-10 transmission equipment cost allocation factor.

The ACCC has forecast conservative data traffic growth of 20 per cent in 2010-11. It has extrapolated the same growth rate for the rest of the regulatory period. Recent ABS data indicates that the 2010 forecast may well be exceeded. The ACCC seeks submissions on expected growth in data traffic.

A more detailed technical exposition of the methodology for adjusting the 'transmission equipment' cost allocation factor is set out in section 10.3.11 below.

In deriving the starting point cost allocation factors for PSTN OTA from the Analysys model, the ACCC has revised its previous calculations to exclude costs for 'PSTN outgoing traffic to international destinations' and 'PSTN outgoing to mobile traffic'. These costs do not relate to PSTN OTA. The ACCC also corrected an error in the calculation of the 2010-11 and 2011-12 cost allocation factors used to estimate the PSTN OTA price for the IADs.

10.3.7 PSTN OTA and LCS—'inter-exchange cables'

The asset values for the 'inter-exchange cables' asset class shown in Telstra's RAF accounts show a decline since 2002-03, despite recent significant growth in data traffic. The ACCC considers that an adjustment to the cost allocation factors for 'inter-exchange cables', similar to that made for 'transmission equipment', is not justified on the basis of the available information.

10.3.8 Allocation factors for ‘network land’ and ‘network buildings and support’ asset classes

Since the September 2010 Draft Report, the ACCC has added new asset classes for ‘network land’ and ‘network buildings and support’ to the FLSM. Cost allocation factors must be developed for these new asset classes.

The Analysys model contains cost allocation factors for land and for buildings and support assets for the ULLS and WLR service. Consistent with the approach for other Analysys factors, the ACCC has adjusted these factors for changes in actual demand since 2008–09 and for forecast changes in demand from 2009-10.

The Analysys model does not contain cost allocation factors for land or for buildings and support assets for the LCS or PSTN OTA service. The ACCC has used a revenue share approach to derive starting point cost allocation factors for the ‘network land’ and ‘network building and support’ assets for LCS and for PSTN OTA. This approach involves the following steps:

- Step 1: The ACCC calculates the 2009-10 total revenue requirement for the following assets: ‘switching equipment’, ‘inter-exchange cables’, ‘transmission equipment’ and ‘Core radio bearer equipment’. Assets classes that have the nature of overheads have been excluded.
- Step 2: The 2009-10 revenue requirements related to the assets listed in Step 1 are calculated for LCS and PSTN OTA.
- Step 3: The revenue requirement calculated for PSTN OTA in Step 2 is divided by the total revenue requirement calculated in Step 1 to obtain the cost allocation factor for 2009-10. The same process is undertaken for LCS to obtain 2009-10 cost allocation factor for LCS.

This approach allocates the costs of the ‘network land’ and ‘network building and support’ asset classes to PSTN OTA and LCS in the same proportion as the revenue requirement calculated in Step 1 is allocated to services.

The starting point 2009-10 cost allocation factors are subsequently adjusted by changes in forecast demand for PSTN OTA and LCS.

10.3.9 Allocation factors for ‘indirect capital assets’

Since the September 2010 Draft Report, the ACCC has added another new asset class ‘indirect capital assets’ to the FLSM. The Analysys model does not contain any relevant allocation factors for this asset class nor has Telstra provided appropriate cost allocations. Cost allocation factors for this asset class must be calculated for all of the declared fixed line services, except for the LSS.

The ACCC has used the same revenue share approach to calculate cost allocation factors as used to develop cost allocation factors for the ‘network land’ and ‘network buildings and support’ asset classes. This approach is described in section 10.4.8 above.

For the ULLS and WLR service, the list of CAN network assets used to calculate the 2009-10 total revenue requirement are: ‘ducts and pipes’, ‘copper cables’, ‘other cables’, ‘pair gain systems’, ‘CAN radio bearer equipment’, ‘other CAN assets’ and ‘other communications plant and equipment’.

The same method, and same list of Core network assets, as described in section 10.3.8 is used to derive ‘indirect capital assets’ cost allocation factors for the LCS and PSTN OTA service. Because the WLR service uses CAN and Core assets, a cost allocation factor related to the ‘indirect capital assets’ included in the Core network is also calculated for WLR.

The 2009-10 ‘indirect capital assets’ cost allocation factors are subsequently adjusted by changes in forecast demand for each service.

10.3.10 Allocation factors for ‘Other communication plant and equipment’

Since the September 2010 Draft Report, the ACCC has included a new asset class ‘other communication plant and equipment’ into the FLSM. In November 2010, Telstra advised that ‘other communication plant and equipment’ assets are composed of CAN radio equipment and building assets.¹⁹³

On the basis of Telstra’s November 2010 advice, the ACCC has allocated the CAN radio equipment component of the ‘other communication plant and equipment’ asset class to the CAN. Telstra did not specify whether the building assets included in the asset class related to the CAN or Core network. The ACCC has allocated these building assets to the CAN and Core network in same proportion as the ‘network building and support’ asset class has been allocated to the CAN and Core network.

For the ULLS and WLR service, the cost allocation factors are a weighted average of the relevant Analysys cost allocation factors for CAN radio equipment and CAN building and support assets. For the LCS and PSTN OTA service, the cost allocation factors have been set equal to the ‘network building and support’ cost allocation factors used in the FLSM to allocate costs to LCS and PSTN OTA.

10.3.11 Technical exposition of the calculation method for the ‘transmission equipment’ cost allocation factor

To obtain an estimate of data traffic in 2008-09 and 2009-10, the ACCC used ABS internet activity statistics from ABS Cat. No. 8153.0—Internet Activity, Australia (December 2010) on the volume of data downloaded by dial-up and fixed line broadband users during the December 2008, June 2009, December 2009 and June 2010 quarters. The ABS does not publish data for the March and September quarters. Data traffic for the June and December quarters was added together and doubled to obtain an estimate of total data traffic for 2008-09 and 2009-10. The estimate of total data traffic was then converted from Terabyte to Megabyte.

Total 2009-10 PSTN voice traffic reported by Telstra in schedule 8 of the RAF was converted from total minutes to Megabyte using the following formula:

$$\text{Total Megabyte} = (\text{PSTN call minutes} * 64 * 60) / 8 / 1000$$

where 64 is assumed to be the required voice channel (kbps)

60 is the number of seconds in a minute

8 bits equals 1 Byte

1000 bytes equals 1 Megabyte

¹⁹³ Telstra, *Pricing principles for fixed line services, response to the ACCC’s request for further information –Schedule 2*, November 2010.

Total data traffic and voice traffic in Megabyte were then added to obtain an estimate of the total traffic using Telstra’s transmission equipment during 2009-10.

The ACCC obtains ISDN traffic data from RAF. The forecast for the regulatory period applies the average decline from the previous five years of data.

The PSTN OTA cost allocation factor is based on the Analysys cost allocation factor, rebased for actual PSTN demand in 2008–09, and then adjusted for the actual change in PSTN voice traffic as a percentage of total PSTN traffic in 2009–10 and forecast changes in the percentage of total PSTN traffic in subsequent years, assuming the following growth rates in voice and data traffic:

Table 10.1: Calculation of PSTN OTA transmission equipment allocation factor

	PSTN⁽¹⁾ (MB)	Annual growth (%)	ISDN⁽²⁾ (MB)	Annual growth (%)	Data traffic (MB)	Annual growth (%)	Cost allocation factor
2009–10 (actual)	██████████	-15.7%	██████████	-23.4%	445,839,310,848		8.59%
2010–11 (forecast)	██████████	-5.0%	██████████	-22.5%	535,007,173,018	20.0%	6.89%
2011–12 (forecast)	██████████	-5.0%	██████████	-22.5%	642,008,607,621	20.0%	5.51%
2012–13 (forecast)	██████████	-5.0%	██████████	-22.5%	770,410,329,145	20.0%	4.39%
2013–14 (forecast)	██████████	-5.0%	██████████	-22.5%	924,492,394,974	20.0%	3.50%
2014–15 (forecast)	██████████	0.0%	██████████	-22.5%	1,109,390,873,969	20.0%	2.93%
2015–16 (forecast)	██████████	0.0%	██████████	-22.5%	1,331,269,048,763	20.0%	2.45%

(1) Sum of local calls, domestic long-distance, international long-distance, fixed to mobile, domestic PSTN originating and domestic PSTN terminating minutes from Telstra RAF reports.

(2) ISDN data traffic is obtained from Telstra RAF Reports.

The ACCC has forecast data traffic growth of 20 per cent in each year of the proposed regulatory period. The ABS has recently released data traffic figures for the December 2010 quarter. This showed a 23 per cent increase from the level reported for the June 2010 quarter. The ACCC has not yet had time to revise its forecasts for the regulatory period to take into account the ABS’s latest revisions. However, the ACCC considers that its 2010-11 forecast may well be exceeded.

11 Geographic cost-based pricing

Key points

- The ACCC has developed a methodology for adjusting the allocation of costs to CAN services to reflect the differential costs of providing services in the different geographic bands. The ACCC proposes to average Band 1 to 3 ULLS prices and set a separate Band 4 ULLS price, using the same approach as adopted in the IADs.
- The ACCC proposes to maintain its current approach of setting nationally averaged WLR, LCS and LSS prices.
- The ACCC seeks industry views on an appropriate pricing structure for PSTN OTA services.

Since 1997, the ACCC has adopted geographically de-averaged prices for the ULLS and PSTN OTA and nationally averaged price structures for the WLR, LSS and LCS.

This chapter outlines the ACCC's approach to de-averaging ULLS and PSTN OTA prices in the September 2010 Draft Report, the revised methodology used to determine ULLS prices in the IADs, and the methodology proposed for setting draft prices for those services in the FADs. It also discusses the reasons for continuing to adopt nationally averaged prices for WLR, LSS and LCS.

11.1 ACCC's approach in September 2010 Draft Report

In the September 2010 Draft Report, the ACCC stated that it proposed to retain the existing price structures for the fixed line services, namely:

- de-averaged prices for the ULLS, keeping the current four Band structure and maintaining the existing band price relativities
- de-averaged prices for PSTN OTA, keeping the current structure for the four geographic (Band) areas and
- nationally averaged prices for the WLR, LCS and LSS.

11.1.1 ULLS de-averaged prices

The ACCC proposed to maintain the current four band pricing structure for ULLS. It considered that averaged prices for the ULLS would not promote competition in non-metropolitan areas, given that the ULLS is not technically viable for delivering high speed data services in large parts of rural areas.¹⁹⁴

The ACCC continued to consider that nationally averaged pricing for the ULLS would not promote the economically efficient use of and investment in infrastructure. The ACCC considered that nationally averaged prices would depart significantly from the real underlying costs of the ULLS in certain geographic areas, thereby distorting

¹⁹⁴ This approach is consistent with the position that the ACCC took in its assessment of Telstra's 2005 ULLS undertaking: *Assessment of Telstra's ULLS monthly charge undertaking – final decision*, August 2006, p. 92. In its review of that undertaking, the Tribunal agreed with the ACCC and concluded that averaged prices for the ULLS were not likely to promote competition in urban or rural areas: [2007] ACompT 3 at 132, 146.

allocative efficiency. The ACCC noted that price averaging would not distort allocative efficiency greatly if the cost differentials are reasonably small. However, the estimated cost differentials between the bands in the September 2010 Draft Report were sufficiently large to justify de-averaged prices. These cost differentials were based on the prices estimated in the September 2010 Draft Report and de-averaged using the existing PIE II Band relativities.

The ACCC noted that inefficient bypass would be likely to occur in urban areas due to the large differential between a nationally averaged ULLS price and the actual costs of providing ULLS services.¹⁹⁵

The September 2010 Draft Report set ULLS prices on a geographically disaggregated basis, with different prices for ESAs in four geographical bands. The bands are delineated on the basis of teledensity¹⁹⁶:

- Band 1 covers the CBD areas of the major capital cities.
- Band 2 covers the urban areas of capital cities, metropolitan regions and large provincial centres (including CBD areas not included in band 1).
- Band 3 covers semi-urban areas including outer metropolitan and smaller provincial towns.
- Band 4 covers rural and remote areas.

From 2003, indicative ULLS prices were disaggregated using cost relativities estimated by the PIE II model. The ACCC applied these cost relativities for the purpose of setting the draft ULLS prices included in the September 2010 Draft Report.

In that report, the ACCC noted that, in the absence of geographic cost information, it had assumed that the average unit cost for the ‘ducts and pipes’ and ‘copper cables’ assets classes were equal for the ULLS, WLR and other services provided using these assets. Costs associated with these asset classes were allocated to these services according to their share of total SIOs. The resulting average ULLS price estimated by the then Ovum BBM was de-averaged into prices for Bands 1, 2 and 3 by applying the existing PIE II-based relativities between ULLS Band prices. For Band 4, a notional price of \$100 was set based on advice from Telstra that it used this price as a working assumption for Band 4.

The ACCC recognised that the method used to set the cost allocation factors for the asset classes used to supply ULLS and WLR ‘does not take into account the different distribution of the ULLS, the WLR and other services across the geographic bands’.¹⁹⁷ While recognising that the costs allocated to the ULLS could be over-estimated by this approach, the September 2010 Draft Report stated that:

the ACCC does not have cost information by band to enable it to take into account any potential difference in unit costs ... However, should better cost information be made

¹⁹⁵ ACCC, *Assessment of Telstra’s ULLS monthly charge undertaking – final decision*, August 2006, p. 89-94. In its review of that undertaking, the Tribunal considered that averaged prices for the ULLS would likely “discourage allocative efficiency because it will lead to a disassociation between the charges and costs of providing the service in different areas”: *Telstra Corporation Ltd (No 3) [2007] ACompT 3* at 172.

¹⁹⁶ Teledensity is a measure of the density of demand for telecommunications services.

¹⁹⁷ ACCC September 2010 Draft Report, p. 90.

available, the ACCC will review the cost allocation factors for ULLS, WLR and other services.¹⁹⁸

It stated further:

To set geographically disaggregated cost-based prices that do not employ the current indicative price relativities, disaggregated cost and asset information would be needed for each band. This information is not currently available.¹⁹⁹

11.1.2 Nationally averaged WLR, LSS and LCS prices

Previously, WLR prices were calculated using a RMRC approach. Since retail prices are set on a nationally averaged basis,²⁰⁰ WLR prices were also set on a nationally averaged basis. In the September 2010 Draft Report the ACCC noted that in the absence of reliable geographically disaggregated cost data, it was unable to estimate cost-based de-averaged prices for WLR services.

Similarly, the ACCC did not have reliable geographically disaggregated cost data to set de-averaged LSS and LCS prices or existing de-averaged prices from which to determine relativities for de-averaging prices.

The ACCC proposed to continue to set these prices on a nationally averaged basis.

11.1.3 De-averaged PSTN OTA prices

The method for disaggregating the headline rate for PSTN OTA in the September 2010 Draft Report was based on 2003 traffic profiles and call holding times. More recent information, including information provided by Optus for the purpose of Telstra/Optus PSTN OTA arbitrations in 2006, indicated that it was possible that there have been changes in the call holding times and traffic profiles that form the basis of the disaggregated rates table for PSTN OTA charges.

The ACCC sought information from interested parties on current call holding times, traffic profiles and the appropriate weights to be used to calculate disaggregated rates.

11.2 Submissions on geographic cost-based prices

11.2.1 ULLS band prices

Telstra stated that maintaining different pricing structures for ULLS (de-averaged) and WLR (averaged), while proposing a substantial drop in the indicative price for WLR prices, would:

- give rise to regulatory distortion, in the form of acute ‘cherry picking’ by access seekers taking advantage of the arbitrage opportunity between both prices, based on geography
- result in significant under-recovery of costs by Telstra, and
- highlight the continued underfunding of, and put at risk future funding of, Universal Service Obligation obligations.

¹⁹⁸ *ibid.*, p. 91.

¹⁹⁹ *ibid.*, p. 101.

²⁰⁰ The current arrangements are set by the Minister for Broadband, Communications and Digital Economy and are contained in *Telstra Carrier Charges – Price Control Arrangements, Notification and Disallowance Determination No. 1 of 2005*.

For these reasons, Telstra advocated the adoption of a single, nationally-averaged ULLS price with a four year glide path to transition to averaged pricing.

In contrast, Optus supported de-averaged ULLS prices, noting that de-averaging was supported by the Tribunal in its 2007 decision to reject Telstra's ULLS undertaking.

Optus's consultant CEG stated that it had identified a significant problem with the methodology outlined in the September 2010 Draft Report to de-average ULLS indicative prices. CEG considered that the ACCC's approach resulted in de-averaged prices that are:

- not cost reflective in the manner the ACCC intends
- inconsistent with the reduction in the overall CAN revenue requirement from existing levels, and
- inconsistent with the calculation of the PIE II model price/cost relativities.

Based on its proposed methodology for estimating geographic cost differentials, CEG claimed that the ACCC's approach over-estimated ULLS prices in each band by approximately 70 percent, relative to cost reflective levels.²⁰¹

Macquarie Telecom and AAPT supported de-averaged ULLS prices because the cost of providing the service varies significantly across geographic areas.

11.2.2 Nationally averaged WLR, LCS and LSS prices

Telstra supported the proposed nationally-averaged price structures applying to WLR, LCS and LSS.

Frontier Economics submitted that adopting nationally-averaged prices for WLR and LCS could distort investment and competition if there are substantial differences in the costs of supplying wholesale services between geographic areas. However, it noted that the potential for distortion at the wholesale level would depend on the extent of retail price distortions, due specifically to controls on the prices of Telstra's downstream retail services. Telstra is required to offer the same retail prices for local calls and basic line rental between metropolitan and non-metropolitan areas.

Frontier Economics did not advocate geographic de-averaging of wholesale prices for WLR and LCS because of its view that de-averaging would:

...distort competition in high cost areas because Telstra's wholesale prices will be close to or above Telstra's retail prices (which must be responsive to competition in low cost area(s)). The result would be to deter entry or aggressive price competition even where the access seeker is more efficient than Telstra at supplying retail services.²⁰²

AAPT supported nationally-averaged WLR and LCS prices for consistency with nationally-averaged pricing of retail line rental and local call charges. It noted also that the geographic costs of providing WLR and LCS are not available. AAPT also supported a nationally-averaged LSS price as the costs of providing the LSS and its provisioning are not dependent on geography.

²⁰¹ CEG, *De-averaging ULLS prices A report for Optus*, Attachment to the Optus submission, p. 13.

²⁰² Frontier Economics submission, p. 35.

11.2.3 De-averaged PSTN OTA prices

Telstra supported the existing two-part, geographically de-averaged pricing structure for PSTN OTA for a number of reasons:

- Maintaining the current price structure will promote price stability.
- The two-part tariff mirrors costs by recovering fixed costs from the flagfall and variable costs from per minute charges.
- Recovering fixed costs, including network costs and the costs of unsuccessful calls, through the flagfall encourages access seekers to use the network efficiently.
- Costs vary significantly across geographic areas. Retail charges may be priced to reflect these geographic cost differences.
- Setting an averaged price for PSTN OTA would allow access seekers to bypass Telstra's network by 'cherry picking' cheap ULLS costs in urban areas while acquiring PSTN OTA in rural areas at an averaged price below supply costs.
- The distribution of traffic by geographic area has not changed significantly since 2003-04, despite the decline in the total volume of traffic.
- Telstra's average call duration across all PSTN traffic, excluding ISDN and dial-up internet minutes, was four minutes in the year to June 2010. Total PSTN traffic includes Telstra's retail calls as well as PSTN OTA traffic.

Optus submitted that nationally averaged PSTN OTA pricing would be appropriate as the cost differences between regions are unlikely to be large. It considered nationally averaged pricing would not result in significantly inefficiency because it is not possible to 'by-pass' PSTN TA and it is unlikely that a PSTN OA access seeker would build by-pass infrastructure.

Optus also submitted that de-averaging the PSTN OTA headline rate, in the manner proposed in the September 2010 Draft Report, would result in Telstra over-recovering its costs because the proposed pricing table is based on traffic patterns that have changed significantly since the rate table was originally constructed in 2003.²⁰³

Macquarie Telecom submitted that the disaggregated PSTN OTA pricing structure is appropriate and beneficial to competition as it has enabled competitors to match the prices of end-user services to their underlying supply costs.

AAPT supported a geographically de-averaged PSTN OTA price. It stated that a nationally-averaged price would not promote competition and the LTIE as it would not reflect the underlying costs of providing the services. It advocated updating the PSTN OTA pricing matrix using more current data.

11.3 ACCC views on geographic cost-based pricing

11.3.1 Methodology for estimating costs by geographic band

The ACCC acknowledges that the lack of geographic cost adjustment to the cost allocation factors for the ULLS and WLR in the September 2010 Draft Report caused estimated ULLS costs to be overstated relative to WLR and Telstra's retail costs.

²⁰³ Optus submission, pp. 43–47.

As noted in that report, the ACCC did not adjust the cost allocation factors for the ‘ducts and pipes’ and ‘copper cables’ asset classes to ULLS, WLR and (implicitly) Telstra retail services because it considered that it did not have significantly reliable data on which to calculate geographic costs by band.

The ACCC has examined CEG’s proposal (submitted by Optus) to use the share of SIOs and the band relativities from the PIE II model, to estimate the cost of providing services in each band. The ACCC has concluded that while CEG’s methodology represents a starting point for considering how to implement geographic cost adjustments, it has a number of shortcomings. Specifically, CEG’s method assumed that:

- the costs allocated to the ULLS in the FLSM represent the total cost of providing copper-based services, and
- the price relativities derived from the PIE II cost model are a reasonable reflection of the relative costs of providing copper-based services in each band.

The first assumption does not account for the additional assets used to provide WLR, that are not used to provide ULLS. These include ‘pair gains systems’ and ‘radio bearer equipment’. It also failed to account for indirect costs, including ULLS specific costs (which correspond to LSS specific costs) and indirect operating and capital costs, none of which are expected to vary on a geographic basis. These additional costs must be accounted for to ensure that Telstra is able to fully recover the costs of providing the ULLS and WLR services.

In regard to CEG’s second assumption, the ACCC has previously questioned the use of the PIE II relativities as an accurate reflection of cost differentials between geographic bands.

Following its consideration of CEG’s proposed methodology, the ACCC developed a more robust methodology to adjust the allocation of costs to ULLS, WLR and other services (mainly Telstra’s retail services) to reflect the differential costs of providing services in the different geographic bands. The adjustments are made only for the two asset classes ‘ducts and pipes’ and ‘copper cables’.

For the other assets used to provide the ULLS and WLR services, the ACCC has assumed that geographic cost differentials are not significant for two reasons: (i) there is no reliable information on which to make such adjustments, and (ii) any geographic cost differentials are expected to be much less than for ‘ducts and pipes’ and ‘copper cables’.

11.3.2 Estimating cost relativities for ‘ducts and pipes’ and ‘copper cables’

The ACCC identified three alternative sources of information on geographic cost relativities—the Analysys model and Telstra’s TEA and PIE II models. Table 11.1 compares the relativities from the three models, using the same pre-tax WACC inputs.

Table 11.1: Cost relativities derived from the Analysys, TEA and PIE II models

Cost relativity to the Band 1-4 average	Analysys	TEA	PIE II
Band 1	13.2%	██████████	16.1%
Band 2	72.0%	██████	49.4%
Band 3	120.8% ^a	██████	106.4%
Band 4	270.8% ^a	██████████	451.8%

Notes: ^a Band 3 and 4 costs were calculated from the Band 3/4 clustered and Band 3/4 remote costs included in the Analysys model. ^b Calculated by applying the Analysys Band 4 cost relativity to the average ‘ducts and pipes’ and ‘copper cables’ cost in the TEA model. The TEA model does not estimate costs for Band 4.

The ACCC has previously highlighted significant problems with the design of the PIE II model,²⁰⁴ specifically:

- By assuming copper is used to provide services in remote areas, even where more efficient and less costly technologies (such as radio, fixed wireless or satellite) are used in practice, the model grossly overstates the relative cost of providing services in Band 4.
- By imposing a grid pattern on the design of the network, the model significantly overstates trench lengths and copper wire lengths which further increases costs in areas where distances are greater (that is, rural and remote areas).²⁰⁵
- The simplified engineering rules used to dimension network elements distort the cost relativities between bands.²⁰⁶

Telstra’s TEA model is a more recent model than the PIE II model and, being less optimised than the other models, could more accurately reflect Telstra’s current network architecture and the actual costs of providing services. However, a major shortcoming of the TEA model for estimating cost relativities is that it only models the copper network in Bands 1–3. To estimate a proxy Band 4 cost relativity, the ACCC has applied the Band 4 relativity from the Analysys model to the average cost of ducts and pipes and copper cables in the TEA model.

To derive cost relativities for the four bands from the Analysys model, the ACCC used the disaggregated costs underlying the model’s Band 3/4 clustered and Band 3/4 remote areas to obtain costs for Bands 3 and 4. For Band 3, the average cost of providing ULL and WLR services was calculated by:

- multiplying the estimated ULLS price for each of geotypes 7-14 by the number of ULLS SIOs in the Band 3 ESAs in the corresponding geotype to obtain the total ULLS Band 3 cost
- multiplying the estimated WLR price for each of geotypes 7-14 by the number of WLR SIOs in the Band 3 ESAs in the corresponding geotype to obtain the total WLR Band 3 cost

²⁰⁴ The PIE II model is a model developed by Telstra for network cost estimation. Telstra has used this model to support several submissions to the ACCC. The ACCC has long held concerns about the accuracy of the results generated by the model: see ACCC, *Assessment of Telstra's ULLS monthly charge undertaking*, Draft Decision, June 2006, p. 37.

²⁰⁵ National Economic Research Associates, *Assessment of the PIE II model – A report for Optus*, July 2003, pp. 6–14.

²⁰⁶ *ibid*, p. 14.

- adding the total ULLS and WLR costs and dividing by total ULLS and WLR Band 3 SIOs to obtain the average Band 3 cost.²⁰⁷

The Band 3 relativity was obtained by comparing the average Band 3 cost calculated according to the above method to the weighted average cost of providing services across all four bands. To calculate the Band 4 relativity, the same methodology was applied using ULLS and WLR costs for geotypes 7-14 and the number of ULLS and WLR SIOs in the Band 4 ESAs in each of these geotypes.

The band cost relativities derived from the Analysys model are similar to those derived from the TEA model for Bands 1, 2 and 3 (when using the Analysys Band 4 relativity in the TEA model). This outcome implies that the optimisation in the Analysys model may not have had a material impact on the relativities between band costs (as distinct from the estimated average *level* of costs). It is possible therefore to conclude the Analysys relativities may be as reliable a reflection of the relative costs of providing services using Telstra's current network architecture as the TEA model could be. An advantage of the Analysys model is that it provides an internally consistent set of relativities, unlike the TEA model which does not include Band 4.

The ACCC has concluded that the Analysys model relativities are appropriate for determining costs in the four geographic bands. The methodology used to calculate these costs and adjust the cost allocation factors for ULLS and WLR is described below.

11.3.3 Methodology for calculating geographically adjusted costs

The process applied by the ACCC to estimate ULLS costs on a geographical basis is described in detail in section 11.4 below. The methodology also results in estimates of the costs of providing WLR in the four geographic bands, which are nationally averaged to obtain the WLR price estimated by the FLSM.

The method involves estimating the basic network costs associated with the 'ducts and pipes' and 'copper cables' asset classes by geographic area using the Analysys model band relativities set out in section 11.3.2 above. These basic network costs are the same by band for ULLS, WLR and Telstra's retail services. The additional costs of providing the ULLS and WLR services are added to these basic network costs to calculate the total cost of providing ULLS and WLR in each band.

The total costs for ULLS in each Band are estimated by the FLSM in the base year dollars. These real costs are converted into nominal terms to obtain the estimated ULLS price per band. For WLR, the estimated real cost per band is averaged across all WLR SIOs and then converted into nominal terms to obtain the estimated WLR price.

11.3.4 ULLS—averaged Band 1-3 price and separate Band 4 price

The ACCC proposes to average Band 1 to 3 ULLS prices. In reaching this view, the ACCC had regard to a number of factors.

Although the ACCC has rejected national averaging of ULLS prices in the past, it has previously considered greater averaging of the lower cost ULLS Bands. Most recently this was considered in the context of the Zone A and Zone B proposals associated

²⁰⁷ Since prices were not calculated for services other than ULLS and WLR, the costs of providing other services could not be taken into account in deriving the relativities between bands.

with the indicative price consultation based around the Analysys model in 2009.²⁰⁸ Those considerations are still relevant today.

As Bands 1 to 3 share similar characteristics and the aggregation of these geographic regions is appropriate and will not have a significant distortionary impact on investment or competition. This view is supported by the significant narrowing of the price differential between Bands 2 and 3 that results from the adoption in the FLSM of the methodology for estimating geographic costs described in section 11.3.1 above with the band cost differentials derived from the Analysys model. As noted in section 11.3.1, the ACCC considers that the previous price differentials, calculated on the basis of the PIE II model relativities, overstated the actual band cost differentials.

Averaging the Band 1 to 3 ULLS prices into a single price simplifies the ULLS price structure and may reduce administrative costs.²⁰⁹

Setting a separate Band 4 price ensures that the much higher costs of providing services in rural areas is reflected in prices. It also recognises that in Band 4, the small scale of markets, and the greater risks associated with attracting sufficient customers to recoup DSLAM investment costs, are likely to be more important to investment decisions than the ULLS/WLR price differential. This is consistent with the ACCC's argument in the September 2010 Draft Report that national averaging of ULLS prices would not promote competition in remote areas 'given that the ULLS is not technically viable for delivering high speed data services in large parts of rural areas.'²¹⁰

The ACCC recognises that a decision to average ULLS prices for Bands 1 to 3 will result in a price increase in Band 1. However, for most access seekers the Band 1 price increase will be more than offset by the lower Band 3 ULLS price and lower prices for other declared fixed line services such as the WLR and LSS.²¹¹

The ACCC considers that the reduction in price charged in Band 3 may promote further investments in DSLAMs in those ESAs. The ACCC is currently addressing the issue of backhaul pricing, which has previously been identified as one of the obstacles to DSLAM roll-outs in Band 3 ESAs.²¹² These two measures could potentially promote greater competition in Band 3, where currently only 1.4 per cent of ULLS lines are located.²¹³

The ACCC has also had regard to the changing nature of the telecommunications industry and NBN Co's stated intention to charge uniform national wholesale prices

²⁰⁸ ACCC, *Draft principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS*, August 2009, p. 21.

²⁰⁹ It would also tend to reduce any market distortions said to be caused by having a de-averaged ULLS price and a nationally averaged WLR price. While retaining a separate Band 4 ULLS price with a nationally averaged WLR price could be argued to distort investment decisions, it is more likely that the small scale of markets in remote areas, and the greater risks associated with attracting sufficient customers to recoup DSLAM costs, are more important to investment decisions in remote areas than the ULLS/WLR price differential.

²¹⁰ ACCC September 2010 Draft Report, p. 52.

²¹¹ Access seekers may also benefit from any reduced administrative costs consequent on the simplification of the ULLS price structure.

²¹² Other obstacles include the small scale of markets in many Band 3 ESAs and the resulting greater risks associated with attracting sufficient customers to recoup DSLAM costs.

²¹³ Telstra CAN RKR data, December 2010.

for the NBN.²¹⁴ The ACCC considers that averaging the Band 1 to 3 ULLS prices at this time will ease industry's transition to national wholesale pricing for the NBN and promote industry stability. The ACCC notes that Band 4 ESAs are largely outside the fibre footprint and are likely to be served by wireless technologies. This provides a further basis for the ACCC decision to set a separate ULLS price in Band 4.

In the absence of bypass of the CAN, greater averaging of ULLS prices will not lead to the possibility of inefficient duplication of the CAN network. In the current situation, the NBN will replace rather than duplicate the CAN.

In averaging the ULLS Band 1 to 3 price, the ACCC has weighted the band prices estimated by the FLSM by the share of total SIOs in each band. The ACCC considered the alternative averaging approach of weighting the underlying band price estimates by demand weights, that is, the share of ULLS SIOs in each band.

Using demand weights could result in significant changes over time in the averaged price if the pattern of demand across bands were to change significantly (even if the estimated underlying band prices remained constant). As noted above, there is potential for an increase in competition in Band 3, which could change the relative shares of ULLS SIOs across the bands. The ACCC concluded that using SIO weights was preferred as it would provide greater price stability than using demand weights.

11.3.5 Nationally averaged WLR, LSS and LCS prices

The ACCC proposes to maintain its current approach of setting nationally averaged WLR, LCS and LSS prices. Setting WLR prices on a nationally averaged basis is consistent with the Government's current arrangements for setting retail prices.²¹⁵ Neither LCS supply costs nor LSS specific costs are expected to vary significantly by geographic area.

In addition, submissions supported continuation of the nationally averaged pricing approach for these three services. No submissions supported moving away from the current pricing structures.

11.3.6 De-averaged PSTN OTA prices

The ACCC has considered alternative approaches to setting prices for the PSTN OTA service. In addition to the comments and information provided in submissions, the ACCC has taken into account:

- the current PSTN OTA pricing matrix
- further information provided by Telstra and three access seekers in response to an ACCC request for information and
- pricing structures adopted for the fixed interconnection service in other countries.

²¹⁴ NBN Co has announced that it intends to: "Provide nationwide access to high-speed broadband through uniform national wholesale access pricing and competitive price offerings." See NBN Co Ltd, *NBN Co Wholesale Access Service: Product and Pricing Overview for Access Seekers*, December 2010, p. 5, available at www.nbnco.com.au/wps/wcm/connect/main/site-base/main-areas/publications-and-announcements/publications/product-and-pricing-overview.

²¹⁵ The current arrangements are set by the Minister for Broadband, Communications and Digital Economy and are contained in *Telstra Carrier Charges – Price Control Arrangements, Notifications and Disallowance Determination No. 1 of 2005*.

Current PSTN OTA pricing matrix

The ACCC first determined indicative PSTN OTA prices, using a TSLRIC approach, in its 2003 Model Terms and Conditions.²¹⁶ A two-part pricing structure was adopted, comprising a flagfall charge and a charge per end minute of use (EMOU). The pricing structure was geographically de-averaged, with different flagfall and EMOU charges in four geographic areas. The ‘headline rate’ is calculated as the total per minute charge for an ‘average’ PSTN OTA call, that is, a call of average duration on a nationally averaged basis.²¹⁷

In determining the pricing structure in 2003, the ACCC used a flagfall to EMOU ratio of 25:75, primarily for consistency with Telstra’s retail pricing structure. An average call duration of 3.98 minutes was used on the basis of information provided by Telstra. The average flagfall and EMOU charges were calculated using a weighted average from traffic profiles provided by Telstra. The ACCC used the PIE II model to establish the broad quantum of costs associated with the PSTN OTA.²¹⁸

The flagfall and EMOU charges comprised a call conveyance cost and an access deficit contribution (ADC). The call conveyance cost is the estimated direct cost of providing PSTN OTA services. The ADC was included in PSTN OTA prices because Telstra was considered unable to recover the full costs of the CAN network from customer access charges due to retail price regulation.²¹⁹ The ADC was a contribution towards Telstra’s efficient costs to maintain competitive neutrality.²²⁰

In the 2003 Model Terms and Conditions, the ACCC determined that it would phase-out the ADC by 2006–07. This decision was based on analysis by the ACCC, which indicated that Telstra’s profitability was sufficient to sustain the removal of the ADC.²²¹ However, following its 2006 review, the ACCC determined that it would maintain the 2005–06 indicative PSTN OTA price matrix (including the ADC).²²² In December 2009, the ACCC decided to roll over existing indicative PSTN OTA charges until their expiry on 31 December 2010.²²³

ACCC information request

The ACCC wrote to Optus, VHA and TPG on 3 November 2010 seeking information on their current PSTN OTA traffic by geographical area and their average call holding times. Optus provided the requested information for the period April 2010 to July

²¹⁶ ACCC, *Final Determination for model price terms and conditions of the PSTN, ULLS and LCS services*, October 2003.

²¹⁷ The average flagfall is divided by the average call holding time and then added to the EMOU component to obtain the PSTN OTA headline rate.

²¹⁸ ACCC, *Final Determination for model price terms and conditions of the PSTN, ULLS and LCS services*, October 2003, p. 35.

²¹⁹ ACCC, *Pricing guidelines for access prices of PSTN terminating and originating access services provided by non-dominant or smaller fixed networks*, March 2001, pp. 21–22. The retail price control arrangements impose price caps on Telstra’s retail connection, line rental, local call, trunk call and international call charges.

²²⁰ ACCC, *Pricing guidelines for access prices of PSTN terminating and originating access services provided by non-dominant or smaller fixed networks*, March 2001, pp. 22–23.

²²¹ ACCC, *Final Determination for model price terms and conditions for the PSTN, ULLS and LCS services*, October 2003, p. 51.

²²² ACCC, *Pricing principles and indicative prices – Local carriage service, wholesale line rental and PSTN originating and terminating access services*, November 2006.

²²³ ACCC, *Pricing Principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS: 1 August 2009 to 31 December 2010*, December 2009.

2010 on 3 November 2010. TPG provided the information for the period September 2010 to October 2010 on 8 November 2010. VHA provided the information for the period October 2010 on 29 November 2010.

The ACCC also wrote to Telstra on 10 November 2010 seeking additional information on its PSTN OTA traffic by geographical area. In its response to the ACCC's information request from 22 November 2010, Telstra provided details of its OA and TA traffic for 2009-10 (consisting of 9 months actual and 3 months forecast traffic data) and the period May to October 2010. It also provided information on average call holding times for total PSTN traffic and OTA traffic. Table 11.2 compares the percentage of traffic in each of the four geographic areas in 2003 (when the matrix was initially created), in 2009-10 and in the period May to October 2010.

Table 11.2: Total PSTN OTA traffic—share of traffic in geographic areas (%)

	2003	2009-10 (Telstra October submission)	May–October 2010
CBD	██████████	██████████	██████████
Metropolitan	██████████	██████████	██████████
Provincial	██████████	██████████	██████████
Rural	██████████	██████████	██████████

Since 2003, the share of OTA traffic in the CBD has increased marginally while the share of traffic in the provincial area has decreased marginally. Larger changes occurred in the metropolitan area, where its share of traffic has fallen, and in the rural area, which experienced growth in its share of traffic.

The geographic traffic information provided by Optus, VHA and TPG confirms Optus' submission that access seekers' traffic distributions may differ significantly from the average OTA traffic distribution. Optus has proportionately more of its PSTN OTA traffic in the provincial and rural areas compared to the average traffic distribution. VHA has most of its traffic in the metropolitan area. TPG has a traffic profile that is broadly similar to the average OTA traffic distribution.

Table 11.3 compares the average call holding time in 2003 (when the matrix was initially created), 2009-10 and for the period May to October 2010. Since 2003, the average call holding time has decreased significantly. However, the information provided by Optus, VHA and TPG shows that there is significant variation in call duration for different access seekers.

Table 11.3: Average call holding time for Telstra - minutes

	2003	2009-10	May–October 2010
Average call holding time	██████████	██████████	██████████

International pricing structures for fixed interconnection services

The ACCC has considered the pricing structures for fixed interconnection services (known as PSTN OTA in Australia) adopted in other countries. Comparative information for the December quarter 2010 was provided by Ovum for Europe and the United States.²²⁴ The ACCC obtained information about the New Zealand pricing

²²⁴ Ovum, *Europe & Americas interconnect charge data*, December quarter 2010 at <http://www.ovumkc.com/kc/telecoms/iProduct/product/?R=OVUM017819&ref=findinfo/index.asp?N=337+%2D455060&Npreserve=337>.

structure from the New Zealand Commerce Commission’s published decisions.²²⁵ Table 11.4 below compares four key features of the pricing structures adopted in nine European countries, the United States and New Zealand.

Table 11.4: Fixed interconnection services—comparison of price structures in New Zealand, Europe and the United States

	Flagfall	Peak/off-peak charges	Routing/switching based charge	Geographically de-averaged
Belgium	✓	✓		✓
France	✓	✓	✓	
Germany		✓	✓	
Greece		✓	✓	
Italy		✓	✓	
Netherlands		✓		✓
New Zealand	✓ *			
Portugal		✓	✓	
Spain		✓	✓	
UK		✓	✓	
US			✓	

* Note: The New Zealand pricing structure allows a choice of a flagfall and per minute charge or usage charges with a minimum call duration.

All of the countries included in table 11.4 above imposed per minute charges. For the European countries included in the table above, the per minute charges varied by time of day (peak and off-peak). In France there were three charging periods (peak, off-peak and night). A different weekend charge applied in Greece, the Netherlands and the UK.

Only two of the European countries imposed a separate set-up (or flagfall) charge, namely, France and Belgium. The ratio of the per minute charge to set-up charge was similar to the flagfall: EMOU ratio of 25:75 in the current PSTN OTA prices. In New Zealand, prices can be structured in the form of a flagfall plus usage charge, or usage based charge with a minimum call duration. Carriers could negotiate their own rates provided the average ‘headline rate’ did not exceed the national rate set by the New Zealand Commerce Commission.²²⁶

Eight of the countries in the table included routing/switching-based charges. Under a routing-based pricing system, call charges are based on the number and type of switching equipment a call uses. For example, a call that requires the use of a local switch, a trunk switch and another local switch to reach its destination, would be charged at a rate that reflects the use of these three switches. In Greece, France, Germany and Portugal, three types of switches are used to carry calls. Italy and Spain uses four types of switches and the UK uses five types of switches.

²²⁵ New Zealand Commerce Commission, *Determination on the Telstra Clear Application for Determination for Designated Access Services*, 5 November 2002 at <http://www.comcom.govt.nz/assets/Imported-from-old-site/industryregulation/Telecommunications/InterconnectionDeterminations/InterconnectionDeterminations/ContentFiles/Documents/tcliad5nov20020.pdf>

²²⁶ New Zealand Commerce Commission, *Determination on the Telstra Clear Application for Determination for Designated Access Services*, 5 November 2002, p. 22.

Geographically de-averaged charging appears to be uncommon. In Belgium, fixed interconnection charges are set in terms of local, intra-access and extra-access areas. In the Netherlands, prices are set in terms of local, regional and national areas.

PSTN OTA pricing options

The ACCC has considered two possible pricing structures for PSTN OTA:

- update the existing pricing structure by removing the ADC and using the current geographic traffic pattern and average call duration (option 1)
- set a national average rate and discontinue setting disaggregated charges (option 2).

The ACCC did not consider introducing peak and off-peak pricing structures for the following reasons. First, it does not have data on peak and off-peak traffic. Second, it has no evidence to suggest that switching costs differ significantly across the day. On the contrary, there is evidence that Telstra’s switching equipment is over-provisioned and there is generally excess switching capacity. Third, introducing a significant change in the pricing structure would create price instability and uncertainty.

The ACCC did not consider introducing routing/switching-based charges for similar reasons. First, it does not have detailed data on routing/switching costs for calls using different types of equipment. Second, it has no evidence to suggest that this type of charging structure would improve the extent to which PSTN OTA charges reflect costs. Third, introducing a significant change in the pricing structure would create price instability and uncertainty.

Option 1: Update the existing pricing structure

The ACCC has updated the existing pricing matrix for the draft PSTN OTA price of 1.0 cent, by removing the ADC and using the current geographic traffic pattern and average call duration. The cumulative impact of each of these adjustments is discussed below.

The ADC comprises a significant component of the PSTN OTA prices included in the IADs. The ADC was allocated 30:70 to the flagfall and the EMOU charge, respectively. Since the ADC was a fixed amount added to the flagfall and to the EMOU charges, it altered the relativities between charges in the four geographic areas. Table 11.5 below shows the PSTN OTA pricing matrix after the ADC has been removed.

Table 11.5: Draft FAD PSTN OTA pricing matrix after removal of the ADC (cents)

	Flagfall (per call)	EMOU	Headline (per minute)
CBD	0.62	0.26	0.42
Metropolitan	0.59	0.42	0.57
Provincial	0.95	0.65	0.89
Rural	4.99	4.20	5.45
Average	1.00	0.75	1.00

* The average flagfall:EMOU ratio has been maintained at 25:75.

Removing the ADC widens the relativities between charges in the four geographic areas, particularly the relativity between the three non-rural areas and the rural area. The flagfall and EMOU charges both fall in the CBD and metropolitan areas while

charges in the provincial area remain similar to current charges. Rural charges increase significantly.

The ACCC also adjusted the matrix to reflect the most recent information available to it on current traffic patterns (that is, for the period May 2010 to October 2010). Table 11.6 shows the updated matrix after removing the ADC and updating for the current pattern of traffic across the geographic areas.

Table 11.6: Draft PSTN OTA price after removing the ADC and using the current traffic distribution (cents)

	Flagfall (per call)	EMOU	Headline (per minute)
CBD	0.58	0.25	0.39
Metropolitan	0.55	0.39	0.53
Provincial	0.89	0.60	0.83
Rural	4.68	3.91	5.08
Average	1.00	0.75	1.00

Updating the matrix to reflect the current geographic traffic pattern reduces all flagfall and EMOU charges compared to table 11.5. This reflects the increase in the proportion of OTA traffic now in the rural area where charges are significantly higher than in the three non-rural areas.

The ACCC further adjusted the matrix to reflect the most recent information available to it on current average call duration, provided by Telstra. In the period May to October 2010, the average call duration was [REDACTED]. The fall in the average call duration reduces the per call flagfall for a given headline rate.

The updated matrix—adjusted by removing the ADC and using the latest traffic distribution and average call duration—is shown in table 11.7. Changing the average call duration only changes the flagfall because it is expressed on a per call, rather than on a per minute, basis

Table 11.7: Draft PSTN OTA price after removing the ADC and using the current traffic distribution and average call duration (cents)

	Flagfall (per call)	EMOU	Headline (per minute)
CBD	0.38	0.25	0.39
Metropolitan	0.36	0.39	0.53
Provincial	0.59	0.60	0.83
Rural	3.08	3.91	5.08
Average	0.66	0.75	1.00

Compared to the current matrix, the flagfall and EMOU charges in the CBD and metropolitan areas are significantly lower. Charges are also lower in the provincial area, although most of the reduction is in the flagfall, with a small fall in the EMOU charge. Rural prices are significantly higher reflecting the removal of the ADC (which previously increased the share of the headline rate recovered from the three non-rural areas).

The ACCC considers that the updated pricing matrix sets charges that more accurately reflect costs and current calling patterns. Removing the ADC results in PSTN OTA prices more closely reflecting actual call conveyance costs and cost relativities across the four geographical areas, obtained from the PIE II model. The ACCC notes, however, that it does not have updated cost information to verify that the costs estimated from the PIE II model are an accurate reflection of current actual costs.

The ACCC also notes that the pricing matrix is based on average costs and average traffic and call duration information. The characteristics of the traffic carried by any particular access seeker may differ in from the average across all access seekers for a number of reasons. These reasons include the geographic location of the access seeker's operations, its mix of customers, whether or not it has established its own network, and, if so, the geographic distribution of that network.

For an access seeker whose traffic characteristics differ from the average, its own 'headline rate', calculated by weighting the charges in the matrix by its own traffic distribution and average call duration, will differ from the headline rate shown in the matrix. The different 'headline rate' would reflect the different pattern of costs imposed on the PSTN by the access seeker's different traffic pattern and/or call duration.

The ACCC notes that it would be open to access seekers to negotiate with Telstra a different pricing matrix since the prices set in FADs provide a benchmark.

Option 2: Set a national average price and no disaggregated charges

The FLSM estimates a single national average price for PSTN OTA. The ACCC does not have geographical cost information to enable it to directly estimate the costs of providing PSTN OTA in different geographic areas.

The method for disaggregating the charges uses cost relativities across the four geographical areas, obtained from the PIE II model. The ACCC does not have updated cost information to verify that the costs estimated from the PIE II model are an accurate reflection of current actual costs.

The ACCC notes that the New Zealand Commerce Commission has previously set an average headline rate and allowed the industry to negotiate disaggregated prices.²²⁷ Optus proposed this approach in its submission. The ACCC has considered whether a similar approach should be adopted for determining PSTN OTA charges.

Determining a national average price only would avoid the need to determine a pricing matrix using potentially out-dated (and inaccurate) geographic cost information obtained from the PIE II model. In addition, it would simplify the PSTN OTA pricing structure. It would also reduce the regulatory burden on access seekers and Telstra to submit PSTN OTA traffic and call duration information.

It would be open to access seekers to negotiate with Telstra a disaggregated pricing matrix for PSTN OTA that reflected their use of the PSTN. The national average price would provide a starting point for those negotiations.

A potential issue from discontinuing this approach is that it would provide no information on relative geographic costs. Such information might assist access seekers in negotiating an appropriate disaggregated pricing structure, even taking into account the possibility that the available information may be out-dated. The ACCC considers that this potential issue could be addressed by providing additional information, without including a pricing matrix in the FADs.

ACCC conclusion

In setting PSTN OTA charges in the FADs, the ACCC proposes to set a national average PSTN OTA price (option 2) for the proposed five-year regulatory period.

²²⁷ New Zealand Commerce Commission, *Determination on the Telstra Clear Application for Determination for Designated Access Services*, 5 November 2002, p. 21-22.

Access seekers will be able to negotiate appropriate disaggregated charges. The ACCC proposes to provide additional information on relative geographic costs and a method for disaggregating the national average price to assist the parties in their negotiations. The ACCC seeks submissions on the type of information that may be provided.

For the transitional six month period from 1 January to 30 June 2011, the ACCC proposes to maintain the pricing matrix included in the IADs. This will promote continuity and certainty for industry.

11.4 Technical explanation of methodology for calculating geographically adjusted costs

The process applied by the ACCC to estimate ULLS costs on a geographical basis is described below. The methodology also results in estimates of the costs of providing WLR in the four geographic bands, which are nationally averaged to obtain the WLR price estimated by the FLSM.

Step 1: The total revenue requirements related to the asset classes ‘ducts and pipes’ and ‘copper cables’ are calculated by the FLSM. These revenue requirements represent the total basic network costs of providing CAN services, that is, ULLS, WLR and Telstra’s retail fixed line services.

Step 2: The revenue requirements from step 1 are divided by the total number of SIOs (ULLS, WLR and Telstra’s retail SIOs) to obtain the average cost per SIO before adjustment for geographic cost differences. This can be expressed mathematically as follows:

$$AC_{dp} = RR_{dp}/\text{total SIOs}$$

$$AC_{cc} = RR_{cc}/\text{total SIOs}$$

where AC_{dp} is the average cost of ducts and pipes

RR_{dp} is the revenue requirement for ducts and pipes

AC_{cc} is the average cost of copper cables

RR_{cc} is the revenue requirement for copper cables

Step 3: The Analysys model cost relativities are applied to the average cost for ‘ducts and pipes’ and ‘copper cables’ calculated in step 2 to obtain the ‘basic cost’ per band for these two asset classes. These costs represent the basic network costs of providing ULLS, WLR and Telstra’s retail services. This is expressed mathematically as:

$$B1 BC = (AC_{dp} + AC_{cc}) * 0.132$$

$$B2 BC = (AC_{dp} + AC_{cc}) * 0.720$$

$$B3 BC = (AC_{dp} + AC_{cc}) * 1.208$$

$$B4 BC = (AC_{dp} + AC_{cc}) * 2.708$$

where B1 BC is the Band 1 ‘basic cost’

B2 BC is the Band 2 ‘basic cost’

B3 BC is the Band 3 ‘basic cost’

B4 BC is the Band 4 ‘basic cost’

In the FLSM, the calculations are done separately for each asset class. For ease of exposition, the two asset classes have been combined for the purpose of this explanation.

Step 4: To the ‘basic costs’ calculated in step 3, a share of indirect costs (including the ‘specific costs’ equivalent to LSS costs) is allocated to ULLS. For WLR, the ‘basic cost’ will have a share of indirect costs plus other direct costs of providing WLR added. (For Telstra’s retail services, this step is implicit and not required for the FLSM calculations.) The method is explained below.

For ULLS, the Bands 1–4 prices are calculated by adding to the Bands 1–4 ‘basic costs’ calculated in step 3 the indirect costs related to the CAN asset classes ‘other assets’, ‘other plant and equipment’, ‘land’, ‘buildings/support’ and ‘indirect capital assets’. These costs are not geographically adjusted and are therefore a uniform cost for each band. They are added to the ‘basic cost’ for each band to obtain the ULLS price for each band, which is set to equal the total cost of supplying ULLS in each band.

$$B1 \text{ ULLS TC} = B1 \text{ BC} + \text{ULLS indirect cost}$$

$$B2 \text{ ULLS TC} = B2 \text{ BC} + \text{ULLS indirect cost}$$

$$B3 \text{ ULLS TC} = B3 \text{ BC} + \text{ULLS indirect cost}$$

$$B4 \text{ ULLS TC} = B4 \text{ BC} + \text{ULLS indirect cost}$$

where B1 ULLS TC is the Band 1 ULLS total cost

B2 ULLS TC is the Band 2 ULLS total cost

B3 ULLS TC is the Band 3 ULLS total cost

B4 ULLS TC is the Band 4 ULLS total cost

For WLR, the nationally averaged ‘basic cost’ is calculated by multiplying the ‘basic cost’ for each band by the number of WLR SIOs in each band, adding together these costs and dividing the result by the total number of WLR SIOs. This is expressed mathematically as:

$$\text{WLR nat. ave BC} = (B1 \text{ BC} * \text{WLR B1 SIOs} + B2 \text{ BC} * \text{WLR B2 SIOs} + B3 \text{ BC} * \text{WLR B3 SIOs} + B4 \text{ BC} * \text{WLR B4 SIOs}) / \text{total WLR SIOs}$$

where WLR nat. ave BC is the WLR nationally averaged ‘basic cost’

B1 BC, B2 BC, B3 BC, and B4 BC are defined as in step 3

WLR B1 SIOs is the number of WLR SIOs in Band 1

WLR B2 SIOs is the number of WLR SIOs in Band 2

WLR B3 SIOs is the number of WLR SIOs in Band 3

WLR B4 SIOs is the number of WLR SIOs in Band 4

To calculate the nationally averaged WLR total cost, the additional costs of providing WLR services must be added to the nationally averaged WLR ‘basic cost’ calculated above. These costs are: (i) the direct costs of CAN ‘other cables’ and ‘pair gains’ and Core ‘local switching equipment’ allocated to WLR in the FLSM, and (ii) the indirect costs related to the CAN asset classes ‘other assets’, ‘other plant and equipment’, ‘land’, ‘buildings/support’, and ‘indirect capital assets’. These costs are not geographically adjusted and are a uniform per band cost added to the nationally averaged WLR ‘basic cost’ to obtain the WLR total

cost and thereby the nationally averaged WLR price. This is expressed mathematically as:

$$\text{WLR TC} = \text{WLR nat. ave BC} + \text{WLR indirect costs} + \text{other WLR direct costs}$$

where WLR TC is the WLR nationally averaged total cost

Step 5: To calculate geographically-adjusted cost allocation factors for the ‘ducts and pipes’ and ‘copper cables’ asset classes for ULLS, the total revenue requirement allocated to ULLS for each asset class is calculated by multiplying the ‘basic cost’ in each band (at step 3) by the number of ULLS SIOs in each band and summing to obtain the total ULLS revenue requirement for ‘ducts and pipes’ and for ‘copper cables’. For each asset class, the total ULLS revenue requirement is then divided by the aggregate revenue requirement (from all services using that asset class) to obtain the cost allocation factor for ULLS.

The same method is applied to obtain the cost allocation factor for WLR included in the FLSM.

12 LSS pricing

Key points

- LSS prices are now estimated within the FLSM following Telstra's provision of information on the costs related to the specific costs of supplying LSS.
- The ACCC has been unable to assess the reasonableness of Telstra's cost information as Telstra did not provide detailed information on how these costs were calculated.
- The specific assets used to provide the LSS have been fully depreciated. Telstra has made no further capital investments in the specific assets used to supply LSS.

12.1 September 2010 Draft Report approach to pricing LSS

Since 2002 the pricing principle applicable to LSS was that the indicative price should be set to recover the incremental specific costs of providing the service. These costs were the operating, maintenance and capital costs of IT systems for ordering and provisioning the LSS, and operating costs associated with LSS product management and front of house operations. No network costs were included in calculating the LSS-specific costs.

A separate TSLRIC model was developed to calculate the specific costs for LSS (and also for ULLS under the previous TSLRIC+ pricing approach). The model combined LSS-specific costs with ULLS-specific costs and Telstra's internal equivalent costs for ADSL over an appropriate cost recovery period.²²⁸ The total cost was then amortised over the cost recovery period and the annual cost was allocated to ULLS, LSS and ADSL services in proportion to the number of active ULLS, LSS and ADSL lines.

The specific costs that were shared between LSS, ULLS and ADSL-equivalent services are:

- Business Support System (BSS) development and operational costs
- front of house staff
- wholesale product management costs and
- indirect costs.²²⁹

The ACCC used this pricing approach in setting an LSS monthly charge of \$2.50 in several final determinations for LSS access disputes. The approach was subsequently endorsed by the Tribunal.²³⁰

In the September 2010 Draft Report, the ACCC adopted a preliminary view that the LSS indicative price should be determined outside the BBM framework through the continued use of the separate specific cost model. In the absence of disaggregated information on the expenditures related to the operational support systems required to

²²⁸ ACCC, *Review of the LSS Declaration – Final Decision*, October 2007, pp.78-84.

²²⁹ *ibid.*

²³⁰ See *Telstra Corporation Ltd (CAN 051 775 556)* [2006] ACompT 4.

provide the LSS, the ACCC noted that it was unable to identify the LSS-specific costs from the information available to it.

The ACCC also stated, in information subsequently placed on its website, that it did not have available information to allow it to update the inputs to the model.²³¹ On this basis, the LSS price would remain at \$2.50 per month. However, the ACCC noted that it had concerns about the accuracy of the estimated costs.

12.2 Submissions on LSS pricing

Most submissions to the September 2010 Draft Report supported the inclusion of LSS into the FLSM to ensure that LSS prices are calculated on the same basis as the other declared fixed line services.

Telstra submitted that prices for LSS should not be calculated using a different cost methodology to that used for other PSTN services.

Optus considered that excluding the LSS from the FLSM was unnecessary and would reduce the economic efficiency of the estimated prices.

Herbert Geer submitted that there is no sound justification for using a TSLRIC-based model for LSS where it is likely that many of the capital costs incurred in the model have already been recovered by Telstra.

Frontier Economics considered that the ACCC's arguments in support of moving to a BBM applied equally to all fixed line services and that it did not see any reason for continuing to apply a traditional TSLRIC for the LSS.

In contrast, AAPT supported the ACCC's proposed approach to continue to price LSS using a separate specific cost model which was established and fully tested during LSS arbitrations.

12.3 Inclusion of the LSS in the FLSM

On 10 November 2010, the ACCC wrote to Telstra requesting information on the specific costs for LSS, ULLS and ADSL to enable it to consider incorporating LSS into the FLSM.²³²

On 22 November 2010, Telstra submitted commercial-in-confidence LSS cost information in RAF format. Telstra provided this information to access seekers who submitted confidentiality undertakings to it. A redacted version of the information was also placed on the ACCC website.²³³

This information identified LSS-specific costs disaggregated by:

- indirect costs allocated to LSS (organisation and product costs)
- LSS-specific expenditure (primarily information technology, staff and accommodation costs) and
- an allocation of network costs related to ducts, pipes and copper cables.

²³¹ See ACCC website at <http://www.accc.gov.au/content/index.phtml?itemId=951666>

²³² ACCC, *Fixed Line Pricing Principles review – Request further information* (Letter from Mr Robert Wright to Telstra), 10 November 2010.

²³³ See ACCC website at <http://www.accc.gov.au/content/index.phtml?itemId=951049>

The ACCC has estimated the total cost of providing the LSS as the sum of the indirect costs allocated to LSS, excluding international settlement costs,²³⁴ and LSS-specific expenditure estimates provided by Telstra. The ACCC has been unable to assess the reasonableness of these estimates as Telstra did not provide detailed information on how these costs were calculated.

In estimating the LSS-specific costs, the ACCC has excluded network costs because these costs are recovered through the prices charged for WLR and Telstra's retail line services.

Total LSS-specific costs are allocated to the LSS through a new asset class called 'LSS equipment' included in the FLSM. These costs are fully allocated to LSS.

No capital charges have been allocated to the 'LSS equipment' asset class because the specific assets used to provide the LSS have been fully depreciated and Telstra has made no further capital investments in these assets. As a result of the full depreciation of these assets, the estimated LSS price has fallen. The price is expected to fall further over the FAD regulatory period as total LSS-specific costs are spread over a growing number of LSS services due to expected continuing growth in LSS demand.

The indirect costs and LSS-specific expenditures allocated to LSS in the FLSM are a component of total indirect operating expenditure. A share of total indirect operating expenditure is allocated to the other fixed line services. To avoid allocating the same costs to more than one service, the FLSM deducts the total costs of providing the LSS from the total indirect operating expenditure allocated to the other fixed line services, before allocating the remaining indirect operating expenditure to these services (see chapter 7).

²³⁴ International settlement costs are defined in Telstra's Regulatory Accounting Procedures Manual (RAPM) as out-payment expenses incurred to overseas carriers for call termination on their networks. The ACCC does not consider it is appropriate to include these indirect costs in total LSS-specific costs as they are not incurred in the provision of LSS.

13 Demand forecasts

Key points

- The FLSM requires demand forecasts for each of the declared fixed line services in order to calculate unit prices for each service.
- The ACCC has revised its demand forecasts for 2010–11 to 2013–14, taking into account: more recent actual demand figures; internal demand forecasts provided by Telstra in November 2010; updated information on factors expected to influence demand for the declared fixed line services; and submissions received in response to the September 2010 Draft Report.
- For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has forecast stable demand for each of the declared fixed line services. The ACCC considers that this is a conservative approach, reflecting the uncertainty surround the timing of the migration of services from Telstra’s copper network to the NBN.
- The ACCC intends to implement a RKR to ensure that Telstra provides demand forecasts for each of the declared fixed line services relevant to future regulatory periods.

The FLSM requires demand forecasts for each of the declared fixed line services in order to calculate unit prices for each service. The share of the revenue requirement allocated to each service is divided by forecast demand to determine the average price for that service.

As noted in chapter 4 of this discussion paper, the ACCC intends to implement a RKR to ensure that Telstra provides demand forecasts for each of the declared fixed line services relevant to future regulatory periods.

13.1 ACCC’s September 2010 demand forecasts

In the absence of forecasts provided by Telstra, the ACCC developed its own forecasts for the purposes of the September 2010 Draft Report. In doing so, it took into account recent trends in demand for each service and other factors expected to influence demand over the proposed regulatory period. Table 13.1 below sets out the demand forecasts used for the September 2010 Draft Report.

Table 13.1 Demand for the fixed line services—actual/estimated (2009-10) and forecast (2010-11 to 2013-14)—September 2010 Draft Report

Services	2009-10	2010-11	2011-12	2012-13	2013-14
Unconditioned Local Loop Service (lines)	827,333	910,066	955,570	979,459	989,253
Growth rate		10.00%	5.00%	2.50%	1.00%
Wholesale Line Rental (lines)	1,252,784	1,215,200	1,196,972	1,182,011	1,170,191
Growth rate		-3.00%	-1.50%	-1.25%	-1.00%
PSTN Originating & Terminating Access (million minutes)	■	■	■	■	■
Growth rate		-10.00%	-8.00%	-8.00%	-8.00%
Local Call Service (million minutes)	5,600	5,040	4,637	4,266	3,925
Growth rate		-10.00%	-8.00%	-8.00%	-8.00%

13.2 Submissions on demand forecasts

Submissions to the September 2010 Draft Report provided limited forecast demand data for the relevant services. A number of submitters disputed the ACCC's forecasts but, apart from Optus, these parties generally did not provide alternative demand forecasts.

Telstra

In its October submission, Telstra stated that the ACCC's demand forecasts were overstated because the ACCC had not accounted for the effects of the NBN roll-out. It stated that the impact of the NBN roll-out on demand for declared services over the next four years will be significant, potentially reducing total demand by 14 to 15 per cent. Telstra submitted that any reasonable forecast of demand for the declared services must account for reasonable assumptions about NBN migration and its impact on the use of Telstra's CAN.

More generally, Telstra submitted that robust demand forecasts cannot be produced beyond 2011-2012.

In its November supplementary submission, Telstra added that the demand calculations in the FLSM imply that the ACCC expects aggregate demand for CAN services to remain steady over the next four years. Telstra noted that demand for CAN services has declined steadily in Australia and internationally over the past decade and this trend could potentially accelerate in coming years.

Optus

Optus submitted that the ACCC should adopt conservative estimates for the WLR, LCS and PSTN OTA services by assuming demand for these services remains constant over the regulatory period at their actual 2008-09 demand levels.

It submitted that the ACCC's forecasts for ULLS were too low. Optus considered that growth in ULLS SIOs would continue, arguing that 'there has been uncertainty

around future industry developments for some years now, yet this has not prevented significant growth in ULLS'.²³⁵

Optus also considered the ACCC's forecasts for WLR to be too low. It expected to see additional growth in WLR in coming years, due to access seekers building market share in regional areas in response to the NBN roll-out, and possible declaration of the wholesale DSL service, which it considered was likely to lead to a strong increase in demand for Telstra's resale services.

Optus submitted that the forecast decline in PSTN OTA demand was too steep, as demand for PSTN OTA will likely increase as access seekers attempt to acquire market share in areas where they do not have DSLAM coverage. In addition, it considered the ACCC's forecast decline for LCS was too rapid.

Macquarie Telecom

Macquarie Telecom submitted that the ACCC's forecast slowing in ULLS demand growth 'seems aggressive given the investment that competing operators have already made in exchange equipment and their desire to utilise this investment'.²³⁶ It further stated that the forecast decline in WLR demand is 'aggressive given the reduction in the indicative price of the WLR which is proposed in the Draft Report'.²³⁷

Macquarie Telecom considered the forecast reduction in PSTN OTA and LCS demand is excessive. In relation to PSTN OTA, it noted that the number of fixed lines in Australia has declined by 1.8 per cent per annum in the five-years to 2010-11, which it does not consider is sufficient to support the dramatic forecast reduction in PSTN OTA demand. In relation to LCS, it questioned the ACCC's assumption that the forecast decline in LCS would mirror that of PSTN OTA.

Frontier Economics

Frontier Economics submitted that the ULLS demand forecasts are too low and they would leave ULLS penetration at the end of the forecast period at an unusually low level compared to other countries. It also considered that the recent trend away from WLR may not continue and may, in fact, be reversed if the lower draft WLR price were to lead to higher WLR demand independent of ULLS take-up.

Frontier Economics submitted that growth in demand for LCS will almost certainly deviate from PSTN OTA demand growth because of the large relative change in prices for the two services proposed in the September 2010 Draft Report.

Herbert Geer

Herbert Geer submitted that current ULLS growth rates will continue or increase due to access seekers only being able to provide new, high bandwidth technologies via their own DSLAMs, and the WLR, LCS and PSTN exemptions requiring implementation of an efficient LSS to ULLS migration.

It stated that the proposed price reductions for WLR and LCS would increase demand for those services and, if not reverse, at least slow the switch from fixed line to mobile

²³⁵ Optus submission, p. 39.

²³⁶ Macquarie Telecom submission to the ACCC's *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report September 2010*, October 2010, (Macquarie Telecom), p. 6.

²³⁷ *ibid.*, p. 7.

telephony. It submitted that the ACCC should explain its assumption that recent trends in PSTN OTA demand will continue.

VHA

VHA submitted that the ACCC should provide more supporting evidence for its demand forecasts.

13.3 ACCC demand forecasts for 2010-11 to 2015-16

The ACCC has revised its demand forecasts since the September 2010 Draft Report to take into account:

- more up-to-date actual demand figures (where available)
- recent information on factors expected to influence demand for the fixed line services over the period 2010-11 to 2013-14
- Telstra's internal demand forecasts provided in November 2010, and
- information and comments provided in submissions to the September 2010 Draft Report.

Since the ACCC is proposing to implement a five-year regulatory period, the ACCC has extended its demand forecasts to 2015-16. This section describes the factors taken into account in developing the revised forecasts.

13.3.1 Telstra's demand forecasts

Following an information request from the ACCC in November 2010, Telstra submitted its internal demand forecasts for each of the declared fixed line services for the three years, 2010-11 to 2012-13.²³⁸ It advised that it was unable to supply demand forecasts for 2013-14.

The ACCC has had regard to Telstra's internal demand forecasts in developing its own forecasts. The ACCC notes that Telstra's forecasts were developed on the basis of estimated 2009-10 demand figures using nine months of actual data and three months of forecast data. For some services, Telstra's demand estimates differ significantly from the actual demand figures now available for the regulated services. The ACCC has therefore adjusted Telstra's demand forecasts to take into account the latest demand figures available to it, as well as its own assessment of the forecasts.

Since Telstra did not provide demand forecasts for 2013-14, the ACCC has assumed that demand growth in 2013-14 will be the same as in 2012-13, pending the receipt of updated forecasts by Telstra and comments in submissions to this discussion paper.

The ACCC will ask Telstra to submit updated demand forecasts in response to this discussion paper, including forecasts for 2013-14 to 2015-16. The ACCC will have regard to these forecasts in estimating final prices for the FADs.

13.3.2 Impact of migration to NBN on demand for services

On 24 November 2010, the Australian Government released the *NBN Co Business Case Summary*. NBN Co has suggested in its business case that its network

²³⁸ Telstra submission, November 2010. A redacted version of the information submission is available on the ACCC's website at: www.accc.gov.au/content/index.phtml?itemId=953633

architecture will be 'ready for market' in August 2012.²³⁹ However, NBN Co noted that the major objectives and timeline for the roll-out of the NBN are dependent on the rapid resolution of relevant Government policy approaches and progress in negotiations with Telstra.

The ACCC notes that Telstra and NBN Co are still finalising a definitive agreement, which will include provisions relating to the migration of services from Telstra's copper network to the NBN. The ACCC will formally assess whether the migration plan complies with the Ministerial migration plan principles once agreement is reached between the parties.

As noted in chapter 10, the ACCC has not received sufficiently detailed or certain information on the planned migration timetable to adjust its demand forecasts for migration to the NBN. Should better information become available about the magnitude and timing of the migration process prior to finalising prices for the FADs, the ACCC may adjust its demand forecasts.

In the absence of this information, the ACCC has adopted a conservative approach to forecasting demand for the final two years of the regulatory period (2014-15 and 2015-16). The ACCC has assumed that demand for each of the declared fixed line services will remain stable.

The ACCC notes that its methodology for adjusting the cost allocation factors to reflect changes in demand for particular services (see chapter 10) will generally limit the impact on unit costs (and therefore prices) of changes in the NBN migration schedule.

13.3.3 Aggregate demand for CAN services

As noted in chapter 10, the ACCC does not consider that it is appropriate to compensate Telstra for any loss of market share, or reduced customer demand for, fixed line services by allocating total network costs across a declining number of retail and wholesale services. The ACCC has therefore not increased unit costs for the declared fixed line services to reflect any further decline in the total demand for fixed line services.

13.3.4 ACCC's revised demand forecasts

The ACCC has taken significant account of Telstra's demand projections provided in November 2010. This is consistent with its preferred approach in the September 2010 Draft Report. In that report, the ACCC noted that it considered that Telstra and access seekers were best placed to provide information on expected demand for the declared fixed line services.

The ACCC notes that it adjusts the cost allocation factors to reflect forecast growth in demand to ensure that its cost allocation factors continue to reflect a service's actual usage of infrastructure (as explained in chapter 10). These adjustments generally ensure that unit prices for services remain stable over the regulatory period. Consequently, the impact on prices of any demand forecasting errors will be limited.

Table 13.2 sets out the demand forecasts used by the ACCC in estimating prices for the IADs and draft FAD prices. Actual 2009-10 demand for ULLS, WLR, LSS and PSTN OTA is included in the table. For LCS, Telstra has provided an estimate of

²³⁹ NBN Co., *NBN Co. Business Case Summary*, 24 November 2010, p. 12.

demand in 2009-10. The ACCC does not currently collect demand information for LCS.

Table 13.2 Demand – actual/estimated for 2009-10 and forecasts for 2010-11 to 2015-16

Services	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
ULLS (lines)	827,333	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Growth rate		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
LSS (lines)	734,155	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Growth rate		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
WLR (lines)	1,252,784	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Growth rate		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PSTN OTA (million minutes)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Growth rate		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
LCS (million calls)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Growth rate		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Sources: For 2009-2010: actual ULLS and LSS data obtained from Telstra’s CAN RKR; WLR data obtained from Telstra’s 2009-10 Annual Report; and PSTN OTA data obtained from Telstra RAF report for 2009-10. For LCS, demand data was obtained from Telstra’s November 2010 submission using 9 months of actual data and 3 months of forecast data.

Details of the ACCC’s revised demand forecasts for each of the declared fixed line services are set out below.

Forecast ULLS demand

Telstra provides the ACCC with usage data for the ULLS under the CAN RKR.²⁴⁰ The total number of ULLS lines grew from 827,333 in June 2010 to 915,091 in December 2010, a six-month growth rate of 10.6 per cent. This followed strong growth in ULLS lines over the first half of 2010 to give an annual growth rate of 19.5 per cent in the year to December 2010.

A number of access seekers suggested that demand for the ULLS is likely to continue growing at current, or close to current, levels. However, in its submission to the September 2010 Draft Report, Optus forecast a slower growth rate of [REDACTED] based on its own internal forecasts.

Frontier Economics suggested that the demand forecasts included in the September 2010 Draft Report would leave ULLS penetration at the end of the forecast period at an unusually low level compared to other countries. However, the ACCC’s analysis suggests that the penetration rate for unbundled services in Australia (that is, ULLS and LSS) is similar to the penetration rate for unbundled services in France and the

²⁴⁰ See ACCC CAN RKR snapshots available at: www.accc.gov.au.

UK, when Australia's remote and low population density areas (in Bands 3 and 4) are excluded.²⁴¹

On this basis, 22.1 per cent of total SIOs in Bands 1 and 2 were unbundled (that is, either ULLS or LSS SIOs) as at June 2010. In comparison, Frontier Economics noted that the percentage of unbundled lines was 22 per cent in France and 27 per cent in the UK in 2009-10. The ACCC's ULLS demand forecasts imply a further increase in the penetration of unbundled services in coming years.

The ACCC has forecast [redacted] annual growth in ULLS lines in 2010-11, slowing to [redacted] in 2011-12 and [redacted] in 2012-13 and 2013-14. The forecast slowing in the ULLS growth rate after 2010-11 reflects the expected impact of the national roll-out of the NBN, which is scheduled to begin in the second half of 2012. The ACCC expects this will increasingly have an influence on access seekers' investment choices and strategies. ULLS lines will begin to migrate to the NBN during 2012-13 and 2013-14. The ACCC's view that demand will slow over the regulatory period is consistent with the demand projections submitted by Telstra and Optus.

In the information provided in November 2010, Telstra's internal estimate of ULLS demand in 2009-10 was significantly lower than actual demand. While its forecasts of ULLS demand growth in the three years to 2012-13 are higher than the ACCC's current forecast growth rates, the ACCC's and Telstra's forecast demand levels are similar by the end of 2012-13.

For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has adopted a conservative approach by forecasting stable demand for the ULLS.

Forecast LSS demand

The ACCC did not forecast LSS demand in the September 2010 Draft Report because the LSS price was derived from a specific cost model outside of the BBM framework (see chapter 12). With the inclusion of LSS into the FLSM, the ACCC has developed demand forecasts for the service.

Telstra provides the ACCC with usage data for the LSS under the CAN RKR.²⁴² The total number of LSS lines grew from 734,155 in June 2010 to 739,241 lines in December 2010, representing a six-month growth rate of 0.7 per cent. Annual growth for the year to December 2010 was stronger at 10.4 per cent.

While growth in LSS lines has slowed recently, the ACCC expects that the proposed reduction in price from the previous indicative price of \$2.50 to the IAD price of \$1.80 will stimulate demand for the service in the second-half of 2010-11. The ACCC has therefore forecast [redacted] annual growth in 2010-11, slowing to [redacted] in 2011-12 and [redacted] annual growth in 2012-13 and 2013-14.

For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has adopted a conservative approach by forecasting stable demand for the LCS.

²⁴¹ The ACCC considers that Bands 3 and 4 should be excluded because population densities in many Band 3 ESAs are lower than population densities in France and the UK while France and the UK do not have remote areas comparable to those in Band 4.

²⁴² See ACCC CAN RKR snapshots available at: www.accc.gov.au.

Forecast WLR demand

Telstra published usage data for WLR as at June 2010 under ‘domestic wholesale’ fixed line SIOs in its 2010 annual report.²⁴³ Table 13.3 shows that the number of WLR lines has been declining since June 2005.

Table 13.3 WLR SIOs (June 2005 to June 2010)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Domestic wholesale lines	2,073,000	2,160,000	1,981,000	1,496,000	1,285,000	1,252,784
Percentage change	-	4.20%	-8.29%	-24.48%	-14.10%	-2.51%

Source: Telstra Annual Report 2010; Telstra Appendix 4E Preliminary Final Report year ended June 2009.

A number of submissions to the September 2010 Draft Report suggested that the ACCC should take into account the effect that a lower WLR price will have on demand for the service. These submissions suggested that a price reduction will be a key factor in slowing, or potentially reversing, the decline in WLR lines.

The ACCC accepts that a reduction in the price for WLR (both in nominal terms and relative to the ULLS price) is likely to have some influence on demand for WLR. It is difficult to quantify the precise effect of the price reduction given the absence of reliable estimates of the price elasticity of demand for WLR (and its cross-price elasticity with the ULLS price). The ACCC has taken into account the views expressed in submissions by forecasting a smaller rate of decline in WLR lines than forecast in the September 2010 Draft Report.

Telstra forecast a steeper rate of decline in WLR lines than the ACCC’s forecasts. However, Telstra’s estimate of 2009-10 WLR demand was lower than the actual demand published in its annual report. In addition, in developing its internal forecasts prior to the release of the September 2010 Draft Report, Telstra is unlikely to have factored in a price reduction for WLR. The ACCC therefore considers a slower decline in WLR demand is appropriate.

For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has adopted a conservative approach by forecasting stable demand for WLR.

Forecast PSTN OTA demand

Table 13.4 shows that total PSTN OTA minutes declined each year between June 2005 until June 2010.

²⁴³ See Telstra annual reports at: <http://telstra.com.au/abouttelstra/investor/financial-information/>.

Table 13.4 PSTN OTA minutes (June 2005 to June 2010)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Domestic PSTN Originating						
Percentage change		-7.25%	-9.96%	-16.76%	-17.78%	-16.18%
Domestic PSTN Terminating						
Percentage change		-2.29%	-3.59%	-1.44%	-3.69%	-6.15%
Total						
Percentage change		-4.26%	-6.04%	-7.07%	-8.33%	-9.11%

Sources: Telstra full year RAF reports for 2004-05, 2005-06, 2006-07, 2007-08, 2008-09 and 2009-10 (Schedule 8 –usage data from each report)

The ACCC considers that falling demand for PSTN OTA is likely to reflect several factors, including:

- access seeker migration from Telstra’s resale fixed line services to services supplied using the ULLS and their own DSLAM equipment—this reduces the amount of PSTN TA traffic
- access seeker investments in their own networks, including mobile networks—this reduces the number of calls using Telstra’s fixed line network
- substitution from fixed to mobile voice services²⁴⁴—this reduces the number of calls originated or terminated on Telstra’s fixed line network. .

The ACCC acknowledges Optus’ view that demand for PSTN OTA could increase as access seekers attempt to acquire market share in areas where they do not have DSLAM coverage prior to the roll-out of the NBN. However, the ACCC considers it is more likely that the decline in demand for PSTN OTA will decelerate, rather than be reversed. While access seekers’ substitution away from Telstra’s resale services to their own infrastructure could slow in the lead up to the roll-out of the NBN, the ACCC expects ULLS demand to continue to grow over the next four years.

In the September 2010 Draft Report, the ACCC forecast a 10 per cent decline in PSTN OTA minutes in 2010-11 and an 8 per cent decline in both 2011-12 and 2012-13. The ACCC is now forecasting a slower 5 per cent annual decline in each year from 2010-11 to 2013-14.

For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has adopted a conservative approach by forecasting stable demand for PSTN OTA services.

Forecast LCS demand

As noted in the September 2010 Draft Report, the ACCC does not collect usage data for the LCS. For the September 2010 Draft Report, the ACCC estimated total LCS demand for 2009-10 by summing the local calls listed in the RAF data for service

²⁴⁴ The penetration rate for mobile voice services exceeds 100 per cent of the population (24.22 million mobile SIOs compared to a total population of 21.87 million at June 2009), due to some individuals maintaining more than one mobile account. See ACMA, *Communications Report 2008-2009*, January 2010, p. 21.

providers using Telstra's network, augmented by an estimated allowance for calls carried by carriers not required to submit RAF data.

In response to the ACCC's November 2010 request for information, Telstra provided an estimate of 2009-10 LCS call minutes based on nine months of actual data and three months of forecast data. Telstra's estimate is substantially lower than the ACCC's estimate in the September 2010 Draft Report. The ACCC methodology for estimating LCS minutes in the Draft Report was unable to distinguish between local call traffic carried on carriers' own networks and traffic carried on Telstra's network. This resulted in a significant overestimate of Telstra's LCS call minutes.

After receiving Telstra's LCS estimate, the ACCC requested information from several access seekers on the percentage of local traffic carried on their own networks compared to that carried on Telstra's network. This information confirmed that Telstra's demand estimate was more accurate than the ACCC's previous estimate. The ACCC has therefore adopted Telstra's 2009-10 demand estimate.

The ACCC does not have historical data to conduct trend analysis for LCS demand. However, the ACCC has considered the information it has on trends in local call traffic, which includes LCS traffic.

The ACCC considers that two key drivers will cause LCS demand to decline: (i) fixed to mobile substitution and (ii) access seeker migration from Telstra's resale fixed line services to services supplied using the ULLS. The ACCC expects these drivers to continue to have a negative effect on LCS demand over the next three to four years.

Telstra provided demand forecasts for LCS for 2010-11 to 2012-13. It has forecast substantial declines in LCS demand, which are significantly greater than the demand falls forecast for WLR and PSTN OTA. These services are purchased in a bundle by some smaller access seekers who then provide resale voice services. For this reason, the ACCC has forecast smaller, but still large, falls in LCS demand.

For the final two years of the regulatory period (2014-15 and 2015-16), the ACCC has adopted a conservative approach by forecasting stable demand for the LCS.

Because the LCS price is set on a per call basis, the ACCC requires forecasts for average call duration for the LCS. These forecasts are used in conjunction with the forecasts for total demand (measured in minutes) to calculate the service price per call.

The ACCC adopted an average call duration of four minutes in the September 2010 Draft Report. Telstra submitted that analysis of its 2009-10 RAF data confirmed that its average call duration was four minutes for the year.²⁴⁵ In contrast, AAPT submitted that its local call holding time is around [REDACTED] and that the industry standard would be much closer to three minutes than to four.²⁴⁶

Without further information from other access seekers, the ACCC has maintained its estimate of an average call duration of four minutes.

²⁴⁵ Telstra submission, p. 129.

²⁴⁶ AAPT Limited, *Submission by AAPT Limited to the ACCC's draft report titled Review of the 1997 telecommunications access pricing principles for fixed line services dated September 2010*, October 2010, p. 22.

Table 13.5 Forecast average call duration for LCS (minutes)

Services	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Average call duration	4.0	4.0	4.0	4.0	4.0	4.0

14 Draft prices for fixed line services

Key points

- The ACCC has estimated draft prices for the FADs from the FLSM for a proposed five-year regulatory period expiring on 30 June 2016.
- The draft access prices have been derived from the FLSM based on assumptions consistent with those used in estimating prices for the IADs.
- The ACCC made a number of revisions to the FLSM between releasing the September 2010 Draft Report and making the IADs. These revisions resulted in the prices included in IADs being different to the indicative prices included in the September 2010 Draft Report.
- Since making the IADs, the ACCC has made a number of minor revisions to the FLSM and updated some of the forecasts used in estimating the draft FAD prices.

This chapter provides an overview of the draft FAD prices. The draft prices have been derived from the FLSM based on the assumptions and forecasts described in chapters 4-14 of this discussion paper.

The table below compares the IAD and draft prices with the previous indicative prices that expired on 31 December 2010 and the draft prices released in the September 2010 Draft Report.

Table 14.1: Comparison of previous indicative prices, September 2010 draft prices, IAD prices applying from 1 January 2011, and draft FAD prices

	Previous indicative prices	September 2010 draft prices	IAD prices 2011	Draft FAD prices from 1 January 2011 to 30 June 2011	Draft FAD prices from 1 July 2011 to 30 June 2016
ULLS Band 1	\$6.60	\$6.50	\$16.00	\$16.00	\$16.75
ULLS Band 2	\$16.00	\$16.00	\$16.00	\$16.00	\$16.75
ULLS Band 3	\$31.30	\$31.00	\$16.00	\$16.00	\$16.75
ULLS Band 4		\$100 (notional)	\$48.00	\$48.00	\$50.11
WLR (per line per month)	\$25.57 (Homeline) \$26.93 (Businessline)	\$20.00 (nationally averaged)	\$22.10 (nationally averaged)	\$22.10 (nationally averaged)	\$22.47 (nationally average)
LSS (per line per month)	\$2.50	\$2.50	\$1.80	\$1.80	\$1.80
PSTN OA and TA (per minute)	1c (headline rate)	1.1c (headline rate)	1.0c (headline rate)	1.0c (headline rate)	1.0c (headline rate)
LCS (per call)	17c	7.0c	9.1c	9.1c	8.7c

Note: All prices are in nominal terms.

14.1 Method of calculating IAD prices

The prices included in the IADs were based on the prices estimated by the FLSM. The IADs apply from 1 January 2011 to 31 December 2011 (or until FADs are made). Since the FLSM calculates prices on a financial year basis, the ACCC converted the financial year price estimates to a 2011 calendar year basis by taking a simple average of the 2010-11 and 2011-12 prices estimated by the FLSM.

The ACCC decided to round up the prices estimated by the FLSM for the WLR and ULLS Band 4 and the averaged ULLS Bands 1 to 3 price. The ACCC considered that this would simplify the rate structure and ensure a seamless transition from the previous ULLS Band 2 indicative prices.

14.2 Method of calculating draft FAD prices

The ACCC has estimated draft prices from the FLSM for a proposed five-year regulatory period expiring on 30 June 2016 (see section 4.5). The ACCC has calculated the draft prices by taking a simple average of the prices estimated by the FLSM for the financial years, 2011-12 to 2015-16. The annual prices estimated by the FLSM are shown in table 14.2 below.

Table 14.2: Estimated annual prices for each service from FLSM and draft FAD prices

	Estimated FAD prices					Average 5-year FAD price*
	2011-12	2012-13	2013-14	2014-15	2015-16	
ULLS Band 1 to 3 (\$/month)	16.23	16.59	16.95	16.87	17.10	16.75
ULLS Band 4 (\$/month)	48.65	49.44	50.26	50.79	51.35	50.11
WLR (\$/month)	22.53	22.29	22.50	22.33	22.70	22.47
PSTN (cents/minute)	1.1	1.0	1.0	0.9	0.9	1.0
LCS (cents/call)	8.8	8.8	9.1	8.5	8.0	8.7
LSS (\$/month)	1.78	1.78	1.77	1.82	1.86	1.80

Note: * Smoothed five-year price obtained by averaging annual prices for 2011-12 to 2015-16.

The ACCC considers that smoothing prices to obtain a single price for each service over the regulatory period will promote certainty and stability. As shown in table 14.2, estimated prices vary on a year to year basis but, apart from PSTN OTA and LSS, do not show any consistent trend. The ACCC considers the annual price movements reflect 'lumpiness' in the FLSM inputs (for example, in assets reaching the end of their asset lives) rather than trends in the underlying costs of supplying the services.

For PSTN OTA and LSS, the trend movement in estimated prices is small and does not, in the ACCC's view, warrant setting annual prices. In reaching this view, the ACCC has taken into account the uncertainty around operating and capital expenditure forecasts, and therefore future estimated prices, after the end of the proposed regulatory period, that is, after 30 June 2016. The ACCC considers this uncertainty prevents it from identifying clear trends in underlying costs at this time.

14.3 Changes in estimated prices between the September 2010 Draft Report and the IADs

As noted in the Statement of Reasons for the IADs,²⁴⁷ the ACCC made a number of revisions to the FLSM, and to the inputs used to estimate prices, between releasing the September 2010 Draft Report and making the IADs. The major revisions to the FLSM, and the chapters of this discussion paper describing these revisions, are:

- changes to the asset classes included in the FLSM, most significantly the inclusion of additional ‘building and support assets’ and ‘indirect capital assets’ (chapter 5)
- indexation of land asset values by the CPI (chapter 5)
- adjustment of the value assigned to ‘ducts and pipes’ assets (chapter 5)
- revisions to the ACCC’s operating and capital expenditure and demand forecasts, reflecting more recent data and additional information from Telstra (chapters 6, 7, and 13)
- updating of the WACC parameters (chapter 6)
- adoption of a revised methodology for determining the cost allocation factors for ‘ducts and pipes’ and ‘copper cables’ (chapter 11)
- incorporation of the LSS into the FLSM (chapter 12).

14.4 Differences between the IAD prices and draft FAD prices

Since the IADs were made, the ACCC received updated capital expenditure forecasts from Telstra. The ACCC took these forecasts into account in developing the capital expenditure forecasts used in the FLSM to estimate the draft FAD prices. The updated capital expenditure forecasts are discussed in chapter 6.

The draft prices differ from the IAD prices for the following main reasons:

- The draft ULLS prices in Bands 1-3 and Band 4 increase in nominal terms, but decline in real terms. This reflects the assumption that operating expenditure is constant in real terms (and increasing in nominal terms) while real capital costs are declining due to falling CAN investment over the proposed regulatory period.
- The draft WLR price decreases in both nominal and real terms, as two asset classes ‘pair gains systems’ and ‘local switching’ are fully depreciated during 2013-14 and 2012-13 respectively, and are not replaced by new assets. These two asset classes are not used to provide the ULLS. In addition, as for ULLS, operating expenditure is constant in real terms (and increasing in nominal terms) while real capital costs are declining due to falling CAN investment.
- The draft LSS price declines in real terms and remains the same in nominal terms. This reflects the assumption that LSS specific costs remain constant in real terms between 2011-12 to 2015-16 while LSS demand is forecast to grow until 2014-15.
- The draft prices for LCS and PSTN OTA both decline in nominal and real terms. A major component of the costs of providing these services is switching costs. Based on the asset lives assumed in the FLSM, switching assets are expected to be fully depreciated by 2011-12. Forecast investment in replacing the circuit switches used

²⁴⁷ ACCC, *Interim access determinations for the declared fixed line services: Statement of Reasons*, March 2011, available at www.accc.gov.au.

on the copper network is very low because electronic switches will be required for compatibility with the NBN fibre network.

A full list of the revisions since the September 2010 Draft Report is included as table 4.1 in chapter 4.

The PSTN OTA price estimated by the FLSM for the 2011 is now 1.1 cents, compared to the price of 1.0 cents included in the IADs. This reflects the correction of a calculation error and ABS revisions to data used in calculating the 'transmission equipment' cost allocation factor for PSTN OTA (see chapter 10.3.6). The ACCC has decided that, for the six month transition period from 1 January 2011 to 30 June 2011, the PSTN OTA price will remain at 1.0 cents, consistent with the IAD price. This decision takes into account the following factors:

- An indicative price of 1.0 cents applied to 31 December 2010 and the draft FAD prices proposed to apply from 1 July 2011 is also 1.0 cents. Increasing the PSTN OTA price by 0.1 cents for a six month period would create undesirable price volatility.
- Leaving the price at 1.0 cents during the six month transition period will promote price certainty, stability and continuity.
- There may be further revisions of the ABS data used to estimate the cost allocation factors.

15 Connection and disconnection charges

Key points

- The ACCC has previously identified the costs it considers to be efficient for the various components of connection and disconnection charges in previous arbitral determinations relating to the LSS (in 2007) and the ULLS (in 2008).
- For both services, connection and disconnection charges were generally based on third party contractor rates estimated by the ACCC in 2005-06 or subsequently supplied by Telstra during access disputes. For subsequent years, the previous year's charges were indexed to maintain their value.
- In calculating connection and disconnection charges for the draft charges for the FADs, the ACCC has indexed connection and disconnection charges by the actual (where available) or forecast changes in CPI.
- Pending consultation on a number of conditions associated with connection and disconnection charges, the ACCC maintained existing conditions for the draft FAD charges. It seeks industry views on these conditions and any other conditions that industry participants consider should be included in the FADs.
- The ACCC also seeks industry views on LSS Managed Network Migration (MNM) cancellation charges, MNM minimum charges, any charges related to the ACT Utilities Tax, and any other charges that industry participants consider should be included in FADs.

Connection and disconnection charges relate to the costs of technicians performing jumpering work inside Telstra exchanges, travel and vehicle costs for the technicians, costs of back-of-house management or assistance for technicians, material costs and indirect costs.

This section discusses the connection and disconnection charges the ACCC proposes for the ULLS and LSS during the proposed regulatory period using the annual inflation assumptions currently included in the FLSM. The inflation forecasts will be updated during the public inquiry if the RBA releases more up-to-date forecasts.

During this public inquiry, the ACCC will consider whether it should set charges for any additional connection or disconnection services.

15.1 *September 2010 Draft Report: approach to calculating connection and disconnection charges*

15.1.1 Background

The ACCC has previously identified the costs it considers to be efficient for the various components of connection and disconnection charges. In 2008, the ACCC made a pricing principles determination relating to the ULLS. This determination included a detailed review of the appropriate indicative connection and disconnection

charges to be applied to the service.²⁴⁸ A similar analysis was conducted in relation to the LSS in 2007.²⁴⁹

For both services, connection charges were generally based on third party contractor rates estimated by the ACCC in 2005-06 or subsequently supplied by Telstra during access disputes. The ACCC recognised that labour costs and contractor charges were likely to change over time.

Accordingly, these connection and disconnection charges were indexed in subsequent years by the average rate of change in labour rates derived from the ABS's Labour Price Index 'ordinary time rates of pay excluding bonuses for the private sector communications services industry'.²⁵⁰ In updating connection and disconnection charges each year, the ACCC applied the change in the index for the previous financial year to bring the charges as at 1 July of the previous year to 1 July of the year during which the charges would apply.

In December 2009, the ACCC decided to maintain the indicative connection and disconnection charges it had established through these regulatory processes until their expiry on 31 December 2010.²⁵¹ In rolling over these charges at their then values, no indexation was applied for the period July 2009 to December 2010.

15.1.2 Calculation of connection and disconnection charges in the September 2010 Draft Report

In the September 2010 Draft Report, the ACCC resumed indexing of connection and disconnection charges.

The ACCC used the mean of the RBA's forecast underlying inflation and its forecast of CPI inflation, for the 12 month period to the date on which the charge would apply, to index connection and disconnection charges in the first two years of the proposed regulatory period.²⁵² For the rest of the regulatory period, the ACCC used the midpoint of the RBA's inflation target (that is, 2.5 per cent).

15.2 Submissions on connection and disconnection charges

Telstra made a number of comments about the method for setting connection and disconnection charges adopted in the September 2010 Draft Report:

- The ACCC should have used the RBA's CPI forecasts to index the charges for the years that they were available, and then used the midpoint of the RBA's inflation target as the inflation forecast for subsequent years.
- The CPI may be inadequate for indexing connection and disconnection charges because it is less than the communications sector's June 2003 to June 2009 wage growth rate.

²⁴⁸ ACCC, *Unconditioned Local Loop Service – Pricing Principles and Indicative Prices*, June 2008, pp. 23-45.

²⁴⁹ ACCC, *Review of the Line Sharing Service Declaration – Final Decision*, October 2007, pp. 99-109.

²⁵⁰ Australian Bureau of Statistics, *6345.0 Labour Price Index, Australia* at <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6345.0/>.

²⁵¹ ACCC, *Pricing Principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS: 1 August 2009 to 31 December 2010*, December 2009.

²⁵² The RBA's inflation forecasts from the *May Statement on Monetary Policy* were used. See Reserve Bank of Australia, *Statement on monetary policy*, 6 May 2010, p. 56.

- LSS disconnection charges should apply to all disconnections occurring outside of an existing churn process to ensure its direct costs are recovered.
- The charges do not allow for the recovery of additional costs that occur under transfer MNMs and after-business-hours MNMs. These costs include implementation costs and IT upgrades for transfer MNMs, while after-business-hours MNMs would require the engagement of third party contractors to perform the jumpering work at after-hours rates.
- The ACCC should specify that the charges do not include the ACT Utilities Tax.
- Cancellation charges should be set for LSS MNMs.

Optus submitted that the ACCC has used an incorrect value for the 2009-10 indicative charge for ULLS transfer MNMs, which results in the estimated charges for the regulatory period being higher than they should be.

Herbert Geer submitted that the ACCC should provide more detail on the data used and calculation method for estimating the September 2010 draft connection and disconnection charges.

15.3 ACCC views on connection and disconnection charges

The ACCC has reviewed its methodology for indexing connection and disconnection charges in response to submissions.

15.3.1 Indexation method

The ACCC maintains its view that the CPI provides a good approximation of wage growth in the communications sector. In support of this view, the ACCC notes that average annual CPI growth from June 2003 to June 2010 was 2.88 per cent²⁵³ while average annual growth in labour rates in the communications sector over the same period is estimated at 2.90 per cent.²⁵⁴

In calculating connection and disconnection charges for the IADs, the ACCC corrected the calculation error in the inflator used in the September 2010 Draft Report. The correct inflator is either the actual change in the CPI, where available; or the relevant RBA inflation forecast for the year to the date from which the charge applies, where available; or the midpoint of the RBA's inflation target range.

Accordingly, the IAD charges were indexed by actual CPI inflation for the 12 months to December 2010. The draft charges for 2011-12 have been indexed by half of the RBA's CPI inflation forecast (of 2.5 per cent) for the 12 months to June 2011 to update them for the six months from the commencement of the IADs on 1 January 2011 to the commencement of the financial year on 1 July 2011. For the following two financial years, the RBA's inflation forecasts have been used to index the charges. The last two financial years of the regulatory period have been indexed by

²⁵³ ABS, 6401.1, *CPI, All groups, Australia*.

²⁵⁴ This estimate takes the geometric average of six years of data from the Labour Price Index covering communications services (from June 2003 until it was discontinued in June 2009) and one year of data (2009-10) from the Labour Price Index for Information Media and Telecommunications for wage growth. See ABS, 6345.0, *Labour Price Index June 2009, Quarterly Index Ordinary time hourly rates of pay excluding bonuses; Australia; Private; Communication services*, and ABS, 6345.0, *Labour Price Index June 2010, Quarterly Index; Ordinary time hourly rates of pay excluding bonuses; Australia; Private; Information media and telecommunications*.

the midpoint of the RBA's inflation target range (2.5 per cent). Table 15.1 below sets out the inflation figures used to index connection and disconnection charges for the IADs and for draft charges.

Table 15.1: CPI inflation used to index connection and disconnection charges

Year	CPI inflation year used (12 months to)	Inflator
IAD charges		
January 2011–December 2011	December 2010	2.7 per cent ^a
Draft FAD charges		
July 2011–June 2012	June 2011	1.25 per cent ^b
July 2012–June 2013	June 2012	2.75 per cent
July 2013–June 2014	June 2013	3 per cent
July 2014–June 2015	June 2014	2.5 per cent
July 2015–June 2016	June 2015	2.5 per cent

Source: Reserve Bank of Australia, February *Statement on Monetary Policy*, 3 February 2011, p. 60.

Notes: ^a Actual CPI published by the ABS. ^b Half of the RBA's CPI inflation forecast for the period from July 2010 to June 2011.

15.3.2 Validity of contractor rates

The ACCC notes that contractor rates were used to set connection charges in previous arbitration decisions.²⁵⁵ The previous pricing principles required that LSS connection charges were set with reference to amounts charged by third party contractors for jumpering work in exchanges.²⁵⁶ The ACCC has previously noted that parties were in agreement that 'the charge for connections and disconnection should be set by reference to contractors' charges'.²⁵⁷

The ACCC proposes that connection and disconnection charges should continue to be set by indexing contractor rates.

15.3.3 LSS disconnections outside the churn process

In setting charges for the IADs, the ACCC decided that single disconnection charges should not be payable when a LSS disconnection is made pursuant to an end-user churning their downstream services to another service provider. The cost of installing

²⁵⁵ ACCC, *LSS Access Dispute – Telstra/Chime – reasons for final determination*, April 2010. ACCC, *LSS Access Dispute – Telstra/Adam Internet – Reasons for Final Determination*, December 2007. These decisions used contractor rates collected by the ACCC from Telstra in 2007 and subsequently marked up by 10 per cent.

²⁵⁶ For example: ACCC, *Pricing Principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS: 1 August 2009 to 31 December 2010*, December 2009.

²⁵⁷ ACCC, *LSS Access Dispute: Telstra/Adam Internet – Reasons for Final Determination*, December 2007, p. 97.

new jumpers and removing existing jumpers will be covered by the connection charge. This view is consistent with previous arbitration decisions.²⁵⁸

By disallowing disconnection charges where the access seeker is participating in the Telstra LSS churn process, but BigPond is not, efficiency will be encouraged because more downstream services will likely be included in the Telstra LSS churn process. In previous arbitration decisions, the ACCC has noted that disallowing disconnection charges in these circumstances would provide Telstra (BigPond) with an incentive to participate in the churn process.²⁵⁹

The ACCC proposes that LSS single disconnection charges should not be payable in these two circumstances.

15.3.4 Managed Network Migrations

The ACCC accepts that an incorrect value (\$140.10) was used in the September 2010 Draft Report for the 2009-10 ULLS MNM charge and has substituted the correct value of \$138.

Transfer MNMs

Consistent with previous decisions, the ACCC considers that whether transfer MNMs occur or not is a matter for negotiation between Telstra and access seekers. If transfer MNMs occur, the ACCC considers that they should be subject to the charges the ACCC has specified (unless a contrary agreement is reached by parties). Additionally, the ACCC maintains its view that:

[s]hould systems developments be required for online ordering systems and NPAMS [National Plant Assignment Management System] in order to support MNMs that involve the transfer of services, then these cost categories would be considered in the cost base for annual rental.²⁶⁰

Any such costs are expected to be of a similar nature to the ULLS and LSS specific costs related to provisioning (see chapter 12 on LSS specific costs; ULLS specific costs are now estimated as part of the total costs of supplying ULLS). These costs could be assessed for potential inclusion in calculating ULLS and LSS monthly costs through the FLSM. Telstra would need to provide sufficient information on any such costs to permit them to be identified and included in the FLSM.

Costs of after-hours MNMs

In regard to Telstra's claim that it will not be able to recover the additional costs incurred when performing after-business-hours MNMs, the ACCC considers that access seekers and Telstra should be able to agree on any additional charges to be paid above the standard charges to cover the additional costs of after-hours provision where an access seeker requests after-hours provision.

The ACCC seeks submissions on whether a provision should be made requiring Telstra to complete the necessary jumpering work for an MNM within a specified timeframe, such as 20 business days. Such a requirement would ensure that after-hours provision would occur at the request of an access seeker wanting an MNM to

²⁵⁸ ACCC, *LSS Access Dispute – Telstra/Chime – reasons for final determination*, April 2010, p. 94.

²⁵⁹ ACCC, *LSS Access Dispute: Telstra/Adam Internet – Reasons for final determination*, December 2007, p. 106.

²⁶⁰ ACCC, *ULLS Access Dispute: Telstra/Chime – Reasons for final determination*, April 2010, p. 120.

occur more quickly where that access seeker was willing to pay the additional costs of after-hours provision.²⁶¹ If Telstra was unable to complete the work within the specified timeframe during business hours, it would be liable for any additional costs for after-hours provision.

LSS MNM cancellation charges

The ACCC seeks submissions on whether to include a LSS MNM cancellation charge in the FAD and to use the same indexation methodology for LSS MNM cancellation charges as for all other charges (that is, applying the methodology specified in section 15.3.1 above). If a LSS MNM cancellation charge is included in the FAD, the ACCC proposes that the same conditions as set out in the April 2010 final determination made in a Telstra/Chime LSS access dispute be applied to those cancellation charges.²⁶² These conditions are:

- The entire MNM cancellation charge is to apply only where the entire MNM scheduled for an exchange is cancelled. It is payable regardless of when the MNM is cancelled.
- Pre-jumping charges are only payable where the cancellation occurs after pre-jumping has taken place within 20 business days of the scheduled cutover date. As there is no need for pre-jumping to occur any earlier than 20 business days from the cutover date, it is not intended for this charge to be levied for cancellations that occur sooner than this. Further, it is not intended for the charge to be imposed where the order is cancelled prior to performance of pre-jumping work.

LSS and ULLS MNM minimum exchange charges in Band 4

In the ACCC's April 2010 final determinations on the Telstra/Chime LSS and ULLS access disputes, the ACCC specified that the LSS and ULLS MNM minimum exchange charges would not apply in Band 4 because there is little, if any, demand for LSS/ULLS connections in Band 4.²⁶³

The ACCC maintained the position adopted in the 2009 pricing principles determination for the purpose of making the IADs. The IADs therefore only excluded the operation of the LSS charges (and not ULLS charges) from Band 4.

The ACCC seeks submissions on whether there should be consistency between the ULLS and LSS MNM minimum exchange charges in their application to Band 4.

15.3.5 ACT Utilities Tax

The ACCC proposes that the connection and disconnection charges should not include the recovery of the ACT Utilities Tax. As the cost only affects services within the Australian Capital Territory and the Jervis Bay area, it is not appropriate to include the tax in charges for work conducted outside those areas.

²⁶¹ An access seeker would be likely to request faster migration to improve the quality of service provided to its end-users, for example by minimising the disruption associated with switching to a new service provider.

²⁶² ACCC, *LSS Access Dispute – Telstra/Chime – reasons for final determination*, April 2010, pp. 114–115.

²⁶³ *ibid.*, p.112; ACCC, *ULLS Access Dispute*, Telstra/Chime, Reasons for final determination, April 2010, p.116

The ACT Utilities Tax is levied per kilometre of the utility network. For the year to 31 March 2010, the tax was \$722 per kilometre. Telstra passes on the tax via a monthly utilities tax charge imposed on eligible services provided in the ACT and Jervis Bay areas. The charge is set out in the wholesale charges section of Telstra's "Our Customer Terms" which is available on Telstra's website.²⁶⁴

The ACCC seeks submissions on how the tax should be recovered from Telstra's wholesale customers.

15.4 Charges for connection and disconnection

In the IADs the ACCC set connection and disconnection charges to apply from 1 January 2011 to 31 December 2011 or until FADs are made. The ACCC has calculated draft charges for 2011-12 to 2015-16. The IAD and draft FAD charges are shown in table 15.2 below.

²⁶⁴ See <http://www.telstrawholesale.com.au/>.

Table 15.2: Charges for connection and disconnection	IAD charges	Draft charges				
	Jan 2011- Dec 2011	Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2013- Jun 2014	Jul 2014- Jun 2015	Jul 2015- Jun 2016
LSS single connections						
Per connection	\$44.26	\$44.82	\$46.05	\$47.43	\$48.62	\$49.83
LSS single disconnections (where payable)^a						
Per disconnection	\$39.74	\$40.24	\$41.35	\$42.59	\$43.65	\$44.74
LSS MNM connection charges – where the service is to be connected on a line Telstra is using to supply a wholesale ADSL service						
Fixed amount (per MNM)	\$143.88	\$145.68	\$149.69	\$154.18	\$158.03	\$161.98
Variable amount (per connection)	\$33.07	\$33.48	\$34.40	\$35.44	\$36.32	\$37.23
LSS MNM minimum exchange charge						
Per exchange	\$805.27	\$815.34	\$837.76	\$862.89	\$884.46	\$906.57
ULLS single connection charges – in use ULLS and transfer ULLS connections						
Band 1	\$51.76	\$52.41	\$53.85	\$55.46	\$56.85	\$58.27
Band 2	\$54.53	\$55.22	\$56.73	\$58.44	\$59.90	\$61.39
Band 3	\$59.26	\$60.00	\$61.65	\$63.50	\$65.09	\$66.71
Charges for ULLS MNM – involving the transfer of end user data services from a Telstra wholesale PSTN and/or ADSL service, or from a line that Telstra is using to supply a ULLS to another access seeker						
Fixed amount (per MNM)	\$141.73	\$143.50	\$147.44	\$151.87	\$155.66	\$159.56
Variable amount (per connection)	\$25.68	\$26.00	\$26.71	\$27.51	\$28.20	\$28.90
ULLS MNM minimum exchange charge						
Per exchange	\$655.23	\$663.42	\$681.66	\$702.11	\$719.66	\$737.65
ULLS call diversion charge						
Fixed amount (per ULLS call diversion)	\$9.55	\$9.67	\$9.94	\$10.23	\$10.49	\$10.75
Variable amount (pro rata per month)	\$12.84	\$13.00	\$13.36	\$13.76	\$14.10	\$14.45
ULLS cancellation charges						
Per service where pre-jumping has occurred	\$20.54	\$20.80	\$21.37	\$22.01	\$22.56	\$23.12
Where entire MNM is cancelled	\$141.73	\$143.50	\$147.44	\$151.87	\$155.66	\$159.56

Note: ^a These charges are not payable for: (a) a disconnection made pursuant to a Telstra churn process by which services can be transferred between LSS, and between LSS and DSL services, or (b) any period in which the access seeker was participating in the Telstra LSS churn process and Telstra (BigPond) was not participating in the Telstra LSS churn process.

16 Assessment pricing approach against the subsection 152BCA(1) criteria

16.1 *The BBM approach*

16.1.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

A BBM pricing methodology estimates prices that reflect efficient costs. The ACCC considers that adopting a BBM approach to setting prices for the declared fixed line services meets the objectives of promoting the LTIE because setting prices that reflect efficient costs will promote competition in the markets for carriage services and encourage efficient use of and investment in infrastructure. Access prices that reflect efficient costs, and do not include any monopoly profits, will facilitate access to the infrastructure services required by access seekers to provide a range of communications services to end-users.

In addition, the ACCC is of the view that adopting a BBM approach will promote the LTIE for the following reasons:

- locking-in a value for the RAB provides predictable revenue and price paths, thereby minimising the likelihood of windfall gains or losses. This certainty promotes efficient investment.
- it provides regulatory certainty for both the access provider and access seekers thereby promoting efficient investment and competition and the markets for carriage services.
- it enables economically efficient investment decisions to be made regarding future infrastructure requirements
- it ensures the access provider is adequately compensated for the cost of providing the declared fixed line services over time as the revenue requirement covers the access provider's efficiently incurred costs (including a commercial return on investment) and
- determining prices through a transparent and cost-based pricing model will assist access seekers in negotiating equivalent access to the declared fixed line services thereby promoting competition in downstream markets.

16.1.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or carriage service provider

The ACCC considers that the access provider's legitimate business interests are met by adopting a BBM approach for the following reasons:

- The initial RAB value places a value on the network assets used by the access provider in providing the declared fixed line services. The ACCC considers that a cost-based valuation approach that allows for the recovery of actual investment costs will best promote the legitimate business interests of the access provider.
- The prices estimated using a BBM approach take into account forecast operating and capital expenditures on assets used to supply the declared fixed line services. Forecast tax liabilities are also taken into account to ensure that the access

provider is able to recover all of the costs incurred in supplying the declared fixed line services.

- The BBM includes a return on capital through the WACC. The WACC provides a commercial rate of return that takes into account the commercial risks associated with providing the declared fixed line services. This gives the access provider an incentive to undertake efficient investments in the assets used to provide the declared fixed line services.
- The BBM includes an allowance for regulatory depreciation which enables the access provider to recover its investments in the assets used to provide the declared fixed line services over the lives of those assets.

16.1.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has had regard to the interests of access seekers in adopting the BBM approach to setting prices for the declared fixed line services.

Adopting a BBM approach provides pricing certainty to access seekers. This will assist access seekers in making informed decisions on investments in DSLAMs and other assets used to provide competing telecommunications services in downstream markets.

The ACCC has given weight to access seekers' interests in determining the values of the parameters used in the BBM, as discussed at section 17.2.3 below.

16.1.4 Paragraph 152BCA(1)(d) – Direct cost of providing access to the declared service

The BBM approach ensures that the direct costs of providing access to the declared fixed line services are included in the revenue requirement used to calculate prices. The revenue requirement calculated using a BBM approach includes an allowance for all of the costs incurred in providing the declared fixed line services. These costs are forecast direct and indirect operating costs, a return on and of capital, and tax liabilities.

Where joint and common costs are incurred in providing a number of services, cost allocation factors are used in the BBM to ensure that the aggregate revenue requirement is appropriately allocated to services. The cost allocation factors are based on the directly attributable costs of providing specific services, as well as a share of non-attributable costs.

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

The ACCC is of the view that this criterion is not relevant to its decision to adopt a BBM approach to setting prices for the declared fixed line services.

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

The ACCC considers that the BBM approach will not compromise the safe and reliable operation of any carriage service, telecommunications network or facility.

The efficient costs of providing the declared fixed line services during the regulatory period are included in the FLSM. This will allow the access provider to recover the costs of necessary maintenance expenditures and network asset replacement costs required to ensure that the declared fixed line services are provided in a safe and reliable manner.

16.1.7 Paragraph 152BCA(1)(g) – The economically efficient operation of a carriage service, a telecommunications network or a facility

The ACCC considers that adopting a BBM approach to setting prices for the declared fixed line services will encourage the efficient operation of carriage services provided on the PSTN.

Under the BBM approach, only efficient costs are included in calculating the revenue requirement that is used in estimating prices. In addition, the proposed efficiency benefit sharing scheme for operating and capital expenditures will give the access provider an incentive to improve its efficiency.

16.1.8 Paragraph 152BCA(2) – The supply of one or more other eligible services

The ACCC considers that the BBM approach takes into consideration the costs and revenues associated with other eligible services supplied using the PSTN.

The cost allocation factors in the BBM ensure that only those costs incurred in providing the declared fixed line services are allocated to the declared fixed line services. The costs and revenues associated with providing other services over the PSTN are not included in the revenue requirement for the declared fixed line services.

16.2 *Draft prices for the declared fixed line services*

16.2.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has implemented the BBM approach by estimating prices using the FLSM. The ACCC is of the view that the prices estimated by the FLSM will promote competition in the markets for carriage services, thereby promoting the LTIE.

By setting wholesale access prices for the declared fixed line services that are based on efficient costs, access seekers will be better able to provide competitive services in retail markets. Moreover, these prices will provide appropriate pricing signals for access seekers' decisions on market entry and infrastructure investments (such as investment in DSLAMs).

The draft prices will prevent the access provider from exploiting its monopoly power by charging wholesale access prices that include monopoly profits. Access prices that

included monopoly profits would unfairly disadvantage access seekers in seeking to compete against the access provider in providing communications services to end-users.

16.2.2 Paragraph 152BCA(1)(b) – Legitimate business interests of a carrier or carriage service provider

The ACCC considers that the legitimate business interests of the access provider are promoted by setting access prices that allow it to recover its efficient costs of supplying access to the declared fixed line services. Wholesale access prices that reflect efficient costs will support efficient investment decisions by the access provider.

The draft prices, set out in this discussion paper, are based on the efficient costs of supplying the declared fixed line services. In estimating prices, the ACCC has forecast the efficient capital and operating expenditures that are likely to be incurred by the access provider during the regulatory period. These costs, which include a return on and a return of capital, are included in the revenue requirement for each declared fixed line service. The revenue requirements are used to estimate prices for these services.

In determining the appropriate initial value of the RAB, the ACCC has taken into account pricing stability to the extent that it supports past investments and promotes industry confidence in making future investment decisions. This consideration also led to the ACCC's decision to set an averaged price for each of the declared fixed line services for the regulatory period. The ACCC considers that the pricing stability promoted by these decisions is in the legitimate business interests of the access provider.

The ACCC also considers that the proposed charges (for connection, disconnection and managed network migration) promote the legitimate business interests of the access provider. These charges are set to recover the labour costs involved in these actions and are indexed as set out in chapter 15.

16.2.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has given weight to access seekers' interests in determining the values of the assumptions and inputs used in the FLSM to estimate the draft prices.

The ACCC considers that it is not in the long-term interests of access seekers or end-users to be supplied with the declared fixed line services at prices that are above or below efficient supply costs. Wholesale access prices that reflect efficient costs will support efficient investments by access seekers. In addition, such prices will promote efficient investment decisions by the access provider in the network assets used to supply the declared fixed line services.

In determining the appropriate initial value of the RAB, the ACCC has taken into account pricing stability to the extent that it supports past investments and promotes industry confidence in making future investment decisions. This consideration also led to the ACCC's decision to set an averaged price for each of the declared fixed line services for the regulatory period. The ACCC considers that the pricing stability promoted by these decisions is in the legitimate business interests of access seekers.

The ACCC has taken into account the legitimate interests of access seekers in deciding to average the ULLS Band 1-3 price. The ACCC considers that setting an averaged price will improve investment incentives in Band 3 ESAs, increase administrative simplicity and ease industry's transition to national wholesale pricing for the NBN.

16.2.4 Paragraph 152BCA(1)(d) – Direct cost of providing access to the declared service

The ACCC considers that the draft prices for the declared fixed line services will allow the access provider to recover its direct costs of providing access to these services.

The ACCC has identified and included the direct costs of providing access to the declared fixed line services in the FLSM. The cost allocation factors used in the FLSM allocate directly attributable costs to the relevant service. For costs that cannot be directly attributable to services, the cost allocation factors allocate a share of these indirect costs to services based on allocation rules generally related to the service's usage of network assets.

The ACCC also considers that the proposed charges (for connection, disconnection and managed network migration) covers the access provider's direct costs of providing those services.

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

The ACCC considers that this criterion is not relevant to setting prices for the declared fixed line services.

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

The ACCC is of the view that determining prices for the declared fixed line services will not compromise the safe and reliable operation of any carriage service, telecommunications network or facility, for the same reasons as those set out in section 16.1.6 above.

16.2.7 Paragraph 152BCA(1)(g) – The economically efficient operation of a carriage service, a telecommunications network or a facility

The ACCC considers that setting cost-based prices for the declared fixed line services will encourage the efficient operation of carriage services provided on the PSTN.

In estimating the draft prices set out in this discussion paper, the ACCC included in the FLSM forecasts of the efficient operating and capital expenditures required to provide the declared fixed line services. In developing these forecasts, the ACCC took into account all relevant available information on the efficient costs of supplying these services, including feedback and information provided in submissions to the

September 2010 Draft Report. In regard to the return on capital, the ACCC estimated the WACC using benchmark parameters for an efficient telecommunications business. Including only efficient costs in the FLSM will provide the appropriate incentives to an access provider for the efficient provision of these services.

16.2.8 Paragraph 152BCA(2) – The supply of one or more other eligible services

In determining the draft prices for the declared fixed lines services in this discussion paper, the ACCC has taken into account the costs and revenues associated with providing other services over the PSTN. The cost allocation factors in the FLSM ensure that only those costs incurred in providing the declared fixed line services are allocated to the declared fixed line services. The costs and revenues associated with providing other services over the PSTN are not included in the revenue requirement for the declared fixed line services.

The ACCC has also taken into account the different costs of providing ULLS, WLR and other services (including Telstra's retail services) in different geographic areas. It has adjusted the cost allocation factors for the 'ducts and pipes' and 'copper cables' asset classes to reflect the different costs of supplying these services in the four geographic bands.

16.3 *Length of the regulatory period*

16.3.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC believes setting the expiry date beyond that of the declarations for the declared fixed line services is warranted, in this instance, as it will provide greater regulatory certainty to industry participants regarding the price of the declared fixed line services.

Price certainty will support the access provider and access seeker in making efficient investment decisions. This certainty will assist the access provider in assessing the commercial viability of future investments in infrastructure services. It will assist access seekers in assessing the commercial viability of market entry and investments in DSLAMs and other assets used to provide competing telecommunications services in downstream markets.

By reducing the risks associated with the investment decisions, price certainty will promote competition in the supply of communications services to end-users.

The ACCC considers that setting a five year regulatory period will also reduce the regulatory burden on industry as it will reduce the frequency of consultations and public inquiries.

16.3.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or carriage service provider

The ACCC considers that setting a five year regulatory period is consistent with the legitimate business interests of the access provider. As noted above in regard to the promotion of the LTIE, price certainty will reduce the risks associated with

investment decisions. The price information will ensure the access provider has more information to assist it in making commercial decisions.

A five year regulatory period will also reduce the regulatory burden on the access provider from frequent price reviews, including providing information required by the ACCC (including forecast information) and participating in consultation processes.

16.3.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that setting a five year regulatory period is consistent with the legitimate business interests of access seekers. As noted above in regard to the promotion of the LTIE, price certainty will reduce the risks associated with access seeker investments in DSLAMs and other assets used to provide competing telecommunications services in downstream markets.

The price information will ensure the access provider has more information to assist it in making commercial decisions on market entry and the supply of communication services to end-users.

A five year regulatory period will also reduce the regulatory burden on access seekers from participating in consultation processes on determining prices for the declared fixed line services.

16.3.4 Paragraph 152BCA(1)(d) – Direct cost of providing access to the declared service

Under the efficiency incentive mechanisms proposed by the ACCC, the access provider will be allowed to retain any costs savings achieved through efficiency improvements until the next regulatory period. The ACCC considers that a five year regulatory period will provide the access provider with stronger efficiency incentives to reduce the direct costs of providing access to the declared fixed line services.

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

The ACCC is of the view that this criterion is not relevant to its decision to set a five year regulatory period.

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

The ACCC is of the view that a five year regulatory period will provide greater certainty to the access provider that it will be able to recoup the costs of expenditures necessary to ensure the safe and reliable operation of the carriage services it provides and its PSTN.

16.3.7 Paragraph 152BCA(1)(g) – The economically efficient operation of a carriage service, a telecommunications network or a facility

The ACCC considers that the a five year regulatory period will provide greater certainty to the access provider that it will be able to recoup the costs of expenditures necessary to ensure the economically efficient operation of the carriage services it provides and its PSTN.

The certainty provided by a five year regulatory period will also assist the access provider in assessing the commercial viability of investments to improve the efficient operation of the carriage services it provides and its PSTN. It will also reduce the risks associated with such investments.

Part B: Non-price terms and conditions

Key points

- The ACCC proposes to include non-price terms and conditions relating to access to the declared fixed line services in the FADs.
- The ACCC has adopted a conservative approach to drafting the non-price terms and conditions.
- The ACCC has not recently consulted on the non-price terms and conditions and seeks submissions on what matters should be covered in these terms.

This Part B sets out issues and calls for submissions regarding the non-price terms and conditions to be included in the FADs for the declared fixed line services.

The ACCC proposes to include the non-price terms and conditions as set out in Schedules 8–17 of the draft FADs. These terms are the same as the terms contained in the IADs released on 2 March 2010, which were themselves based on the *Model Non-Price Terms and Conditions Determination 2008* (2008 Model Terms).

The ACCC is of the view that these non-price terms and conditions are non-controversial. If issues arise that require further consideration, the ACCC may hold a public inquiry to vary the FADs after the making of the FADs and the publication of the Final Report.

17 Non-price terms and conditions under previous regime

Under the previous Part XIC access regime, the ACCC was required to consult on and make model terms and conditions relating to access for certain core services.²⁶⁵ Those model terms and conditions included non-price terms and conditions. The 2008 Model Terms are the culmination of the most recent whole of industry consultation on model non-price terms and conditions for the core services under the previous regime.²⁶⁶

The ACCC has also considered certain non-price issues relating to access to some of the declared fixed line services when arbitrating access disputes.

18 Non-price terms and conditions in IADs

The ACCC decided to include non-price terms and conditions in the IADs for all the declared fixed line services. The ACCC considered that their inclusion would reduce the number of access disputes between parties in the transitional period for areas covered by the non-price terms and conditions.

The ACCC adopted a conservative approach to drafting the non-price terms and conditions in the IADs. This is because no consultation is required before making an IAD. In addition, non-compliance with an IAD is a breach of a carrier licence condition and a service provider rule. Each breach may result in substantial pecuniary penalties of up to \$10 million.

²⁶⁵ The core services included PSTN OA, PSTN TA, ULLS and LCS: repealed subsection 152AQB(1) of the CCA.

²⁶⁶ ACCC, *Model Non-Price Terms & Conditions Determination 2008*, 17 November 2008, available on the ACCC website: www.accc.gov.au.

The majority of the non-price terms and conditions in the IADs were drafted in substantively similar terms to the 2008 Model Terms. However, the drafting in some schedules in the IADs were based on terms contained in more recent FDs made in arbitrations in relation to the ULLS and the LSS. The ACCC consulted with industry before making the 2008 Model Terms, and consulted with a number of parties when making the arbitral FDs. The source of the non-price terms and conditions contained in the IADs is outlined in the below table.

Schedule in IAD	Non price terms and conditions	Source
8	Billing and notification	2008 Model Terms
9	Creditworthiness and security	2008 Model Terms
10	General dispute resolution procedures	2008 Model Terms
11	Confidentiality provisions	2008 Model Terms
12	Communication with end-users	2008 Model Terms
13	Network modernisation and upgrade provisions	FDs made in April 2010 in relation to various ULLS and LSS access disputes. Copies of some of those FDs are available on the ACCC website: LSS: http://www.accc.gov.au/content/index.phtml/itemId/793060 ULLS: http://www.accc.gov.au/content/index.phtml/itemId/793062
14	Suspension and termination	2008 Model Terms
15	Changes to operating manuals	2008 Model Terms
16	ULLS ordering and provisioning	Schedule 16 (excluding clauses 16.18 to 16.23) – 2008 Model Terms Clauses 16.18 to 16.23 (LSS to ULLS transfer process section) – FDs made in August 2010 in relation to ULLS access disputes. A copy of a FD and statement of reasons has been published on the ACCC website: http://www.accc.gov.au/content/index.phtml/itemId/793062

For the purposes of the IADs, the ACCC did not include the following clauses contained in the 2008 Model Terms:

- the liability (risk allocation) provisions which are contained in clause C of the 2008 Model Terms
- the intact vacant ULLS (iVULLS) provisions which are contained in clauses J.20 to J.24 and annexure 2 of the 2008 Model Terms, and
- the facilities access provisions which are contained in clause K of the 2008 Model Terms.

The ACCC considered that the liability (risk allocation) provisions contained in the 2008 Model Terms had the potential to impose substantial liability on either the access seeker or access provider, which may have represented a significant change from the current or past arrangements between parties. The ACCC considered that it was more appropriate to consult with industry on the drafting of liability (risk allocation) provisions as part of the FAD consultation process.

The ACCC understands that there may be an alternative process for iVULLS ordering and provisioning currently being employed by industry participants than that contained in the 2008 Model Terms. As such, the ACCC considered that it was more appropriate to consult with industry in relation to an appropriate iVULLS process as part of the FAD consultation process.

The ACCC also considered that the facilities access provisions contained in the 2008 Model Terms had the potential to disrupt current industry processes regarding facilities access. The 2008 Model Terms were not binding on access seekers and access providers. The ACCC was only required to have regard to the 2008 Model Terms when it arbitrated an access dispute to which they applied. Incorporating the 2008 Model Terms into IADs could have made them binding on parties (for example, if parties cannot agree on facilities access terms and conditions amongst themselves). As such, the ACCC considered it was appropriate to consult on the terms and conditions of facilities access as part of the FAD consultation process.

A copy of the IADs is available on the ACCC website at: www.accc.gov.au.

A word version of the IADs as well as the three excluded sections of the 2008 Model Terms (listed above) are published on the ACCC's website at <http://www.accc.gov.au/content/index.phtml/itemId/758496> for the purpose of preparing submissions on the non-price terms in the FADs.

19 Non-price terms and conditions in the FADs

The ACCC seeks submissions on all aspects of non-price terms and conditions proposed in the draft FADs for all or any of the declared fixed line services.

The ACCC has assessed the proposed non-price terms and conditions against the criteria found in subsection 152BCA(1) of the CCA. That analysis can be found in Chapter 20.

19.1 *Billing and notification*

The ACCC proposes the inclusion of billing and notification terms and conditions for all the declared fixed line services as in schedule 8 of the draft FADs. The ACCC believes the terms and conditions at schedule 8 of the draft FADs provide a clear, practical billing and notification framework for both the access provider and access seekers.

The terms set out the access provider's responsibilities to provide accurate bills within certain timeframes. The terms also define the manner in which the access provider is paid for services it supplies, and sets out procedures for dealing with billing disputes.

Access seekers require accurate and timely billing data in order to bill end-users. Access seekers may also be adversely affected if bills for services are materially inaccurate or unduly delayed, or if workable processes do not exist to resolve billing disputes in an appropriate and timely manner. These terms provide a mechanism to ensure that access seekers' needs regarding billing are met.

19.2 *Creditworthiness and security*

The ACCC proposes the inclusion of creditworthiness and security terms and conditions for all the declared fixed line services as in schedule 9 of the draft FADs.

These terms protect the access provider's interests by enabling it to make appropriate enquiries as to the creditworthiness of an access seeker or seek Security where it is necessary to protect its legitimate business interests. This reduces the likelihood that an access seeker will default on a payment to the access provider.

19.3 *General dispute resolution procedures*

The ACCC proposes the inclusion of general dispute resolution procedures for all the declared fixed line as in schedule 10 of the draft FADs.

These terms establish how disputes should be managed, including applicable timeframes. General dispute resolution procedures facilitate the resolution of disputes in an expeditious manner without the need to resort to legal proceedings or commercial arbitrations, although the parties can commence legal proceedings in certain circumstances. These terms also give parties a mechanism for enforcing other non-price terms and conditions of access. For example, these provisions can be used to help resolve disputes regarding major network modernisation and upgrade. Dispute resolution procedures promote the interests of both the access provider and access seekers, as they set out a clear and definitive means of dealing with disputes.

19.4 *Confidentiality provisions*

The ACCC proposes the inclusion of confidentiality terms and conditions for all the declared fixed line services as in schedule 11 of the draft FADs.

These terms seek to ensure that confidential information used or obtained in the course of providing access is not used to the other party's detriment. It will often be the case that one party will need to disclose confidential information to the other.

19.5 *Communications with end-users*

The ACCC proposes the inclusion terms and condition for communications with end-users for all the declared fixed line services as in schedule 12 of the draft FADs.

These terms concern how an access provider can communicate with the end users of an access seeker. These provisions limit access providers from engaging in aggressive marketing strategies to the access seeker's end users. The terms and conditions provide an assurance to the access provider and all service providers that any marketing to end-users will be done appropriately, and that an access provider will not use its control over the network to 'win back' end-user customers.

19.6 *Network modernisation and upgrade provisions*

The ACCC proposes the inclusion of network modernisation and upgrade terms and conditions for all declared fixed line services as in schedule 13 of the draft FADs.

'Network modernisation and upgrades' describe a broad spectrum of actions that could affect the network over which core services are supplied. These range from matters that have the potential to significantly disrupt services (such as the relocation of exchanges/nodes or altering the deployment class of equipment that the network will support) to matters that will have little consequence for the availability or quality of services. The terms and conditions proposed by the ACCC cover a range of issues that may arise in relation to these actions.

Some of the terms and conditions proposed in schedule 13 of the draft FADs deal with actions in response to an unforeseen change in circumstances or an emergency, or in implementing planned network changes.

19.7 Suspension and termination

The ACCC proposes the inclusion of suspension and termination terms and conditions for all the declared fixed line services as in schedule 14 of the draft FADs.

These provisions concern the circumstances in which an access provider may suspend or terminate a service of an access seeker, including timeframes for an access seeker to rectify their conduct.

19.8 Changes to operating manuals

The ACCC proposes the inclusion of changes to operating manual terms and conditions for the ULLS as in schedule 15 of the draft FAD for the ULLS.

These terms concern the access provider's right to make amendments to its operational manuals, such as its ordering and provisioning manual, without the agreement of an access seeker.

19.9 Ordering and provisioning

The ACCC proposes the inclusion of ordering and provisioning terms and conditions for the LSS and the ULLS, as in schedule 16 of the draft FADs.

These terms set how service orders are to be placed, and how those orders are to be fulfilled.

19.10 Liability (risk allocation) provisions

Clause C of the 2008 Model Terms contained provisions relating to liability (risk allocation). The ACCC did not include these provisions in the IADs for the declared fixed services, but noted to industry it would consult on whether to include these provisions in the FAD consultation process.

Question

1. Should liability (risk allocation) provisions be included in the FADs for all or any of the declared fixed line services?

19.11 iVULLS Process

The 2008 Model Terms contained provisions relating to an ordering and provisioning process for iVULLS.²⁶⁷

When it made the IADs, the ACCC understood that there may have been an alternative iVULLS process currently being used by industry than that contained in the 2008 Model Terms. As such, the ACCC considered that it was more appropriate to consult with industry in relation to an appropriate iVULLS process as part of the FAD consultation process.

An iVULLS process is potentially relevant to where there is an existing copper path to the end-user premises, but no current service (i.e. the line has soft dial tone only). An

²⁶⁷ Clauses J.20 to J.24, and annexure 2, of the 2008 Model Terms.

example is where an end-user moves into premises that have previously had a fixed line service and the previous copper path has not been reassigned.

Previously concerns have been raised, and an access dispute has been notified, concerning perceived deficiencies in the ordering and provisioning process that could be used to activate a ULLS in this circumstance.

At the time of drafting the 2008 Model Terms, the ACCC considered that in the absence of an iVULLS process, the ULLS would be ordered and provisioned under the existing vacant ULLS (VULL) process. The VULL process requires ‘truck rolls’ to end-user premises, and would have involved additional cost compared with the connection under an iVULLS process (as set out in the 2008 Model Terms), as well as compared to the reconnection of a retail or wholesale line rental service.²⁶⁸

When it made the 2008 Model Terms, the ACCC considered that once an iVULLS process was established, there would be ongoing cost savings to the access provider and access seeker, as unnecessary truck rolls would be avoided.

The ACCC also noted that there would be a risk that a particular iVULLS order would fail, due to the existing copper path not supporting the desired deployment class for the ULLS. In these circumstances, the 2008 Model Terms required the access seeker to pay the costs incurred in respect of the iVULLS order to that point. The access seeker would need to use the VULL ordering and provisioning process should it wish to continue with its order.

At the time of making the 2008 Model Terms, the ACCC was of the view that fair and reasonable ULLS ordering and provisioning terms required Telstra to support an iVULLS process.

The ACCC seeks submissions on the inclusion of an iVULLS ordering and provisioning process in the FAD for the ULLS, and if so, what those provisions should contain.

Questions

2. Should an iVULLS ordering and provisioning process be contained in the FAD for ULLS?

19.12 Facilities access

The ACCC decided not to include the facilities access terms and conditions in the IADs. The ACCC indicated that it would consult with industry regarding the inclusion and content of facilities access provisions in the FADs for fixed line services.

Clause K of the 2008 Model Terms set out terms and conditions relating to facilities access. Those terms and conditions set out how an access seeker can access Telstra facilities in order to acquire a core service, and interconnect its own equipment in order to supply services to end-users off the core services. Facilities access terms and conditions are relevant to the ULLS, LSS, and to a lesser extent, PSTN OTA services.

The relevant facilities could include distribution frames, space at or adjacent to the exchange (internal or external to existing buildings) in which to install the equipment to be interconnection and ancillary facilities, such as power plant, security and air-

²⁶⁸ ACCC, *Final Determination – Model Non-price Terms and Conditions*, November 2008, p. 47.

conditioning. Designated space in a Telstra exchange for access seeker use is referred to as TEBA space.

Telstra has developed processes and other arrangements by which facilities access can be requested. However, in the past, access seekers have been concerned by the potential for them to be denied access to an exchange when there is available capacity.²⁶⁹ They have also been concerned by the potential for extensive delays in gaining access to available and/or expanded capacity at an exchange, and what they see as insufficient consultation arrangements around facilities access.

The ACCC seeks submissions on whether to include facilities access provisions into the FADs for fixed line services, and if so, what those provisions should contain. The ACCC considers that it may be useful for industry to have benchmark facilities access terms and conditions, given that access seekers and access providers can no longer have recourse to the arbitration provisions contained in the old Part XIC access regime.²⁷⁰

Questions

3. Should the FADs for the declared fixed line services include terms and conditions relating to facilities access?
4. Please provide comments on any of the proposed non-price terms and conditions and any appropriate amendments to them.
5. Are there any additional non-price terms and conditions that are appropriate to be included in the FADs?

20 Assessment of the non-price terms and conditions against the subsection 152BCA(1) criteria

20.1 Billing and notifications

The proposed terms regarding Billing and Notifications are set out in Schedule 8 of the draft FADs. These terms concern how an access provider may bill for services, and the billing dispute process.

20.1.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered whether the proposed terms and conditions in Schedule 8 of the draft FADs will promote the LTIE. The ACCC has formed the view that the terms and conditions set out in the schedule will promote competition in markets for listed services.

Unfair or unreasonable delays in the invoicing process could impede an access seeker's ability to compete in downstream markets, by affecting their ability to obtain timely billing data (which is in turn required to bill end-users and recover their costs of service). The terms and conditions proposed in Schedule 8 of the draft FADs specify the timeframes for an access provider to give the access seeker an invoice for

²⁶⁹ [2010] FCA 790.

²⁷⁰ Facilities access disputes can still be notified by carriers only under Part 3, Schedule 1 of the *Telecommunications Act 1997*.

charges, including uninvoiced charges or understated charges. These terms and conditions prevent unfair or unreasonable delays in billing. This in turn promotes an access seeker's ability to compete, promoting competition in markets for telecommunications services.

Having a billing process set out in the FAD provides certainty regarding the payment for services and the timeframes in which this will occur. This provides assurance as to how the costs of investment will ultimately be recouped and lowers the risk of investment. This in turn promotes the economically efficient investment in infrastructure by which listed services are supplied, and any other infrastructure by which listed services are capable of being supplied.

The objective of achieving any-to-any connectivity is not relevant to proposed Schedule 8, as it does not concern connectivity between telecommunications networks.

20.1.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has balanced the legitimate business interests of the access provider with other competing considerations under subsection 152BCA(1) of the CCA. The ACCC considers that the proposed terms and conditions in Schedule 8 of the draft FADs take into account those legitimate business interests. For example, the schedule stipulates the timeframe within which an invoice is payable to the access provider, which facilitates recovery of payment for services provided in a timely manner. This consequently promotes certainty and encourages efficient investment in the declared services.

The proposed terms and conditions also set a timeframe in which a billing dispute notice may be given to an access provider, and a process whereby a billing dispute can be escalated. The ACCC considers that an access provider's legitimate business interests will benefit from the certainty of clear and timely billing dispute resolution processes and certainty regarding the timeframe in which potential disputes under the schedule can be notified.

20.1.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has considered the interests of all persons who have rights to use the declared service. The proposed terms and conditions in Schedule 8 of the draft FADs create obligations regarding payment of invoices and billing dispute notification. However, it is relevant to note that these obligations are not unnecessary or excessive to the point of deterring potential access seeker entry into the market (which in turn could displace less efficient service providers).

The clear and practical processes set out in the proposed schedule will assist all users (and potential users) of the declared service by setting rules and responsibilities around billing and dispute resolution. Such procedures can reduce the time spent in disputes and lead to more efficient and economical dispute resolution outcomes.

20.1.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that the proposed terms and conditions in Schedule 8 of the draft FADs do not directly impact on the direct costs of providing access to the declared services. Rather, the terms stipulate the invoicing processes by which costs are recovered.

20.1.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions in Schedule 8 of the draft FADs will not affect the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else because this schedule refers to billing and notifications and not the value of network enhancements.

20.1.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the proposed terms and conditions in Schedule 8 of the draft FADs will not affect operational and technical requirements necessary for the safe and reliable operation of a carriage service, as they do not address operational and technical requirements.

20.1.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the proposed terms and conditions in Schedule 8 of the draft FADs help to promote the economically efficient operation of a carriage service. Clear billing and dispute resolution procedures help to make operations more efficient by reducing time spent on dispute resolution.

20.2 *Creditworthiness and security*

The proposed terms regarding creditworthiness and security are set out in Schedule 9 of the draft FADs. These provisions concern the access provider's rights to make

enquiries of the access seeker's ability to pay, and to require that security be provided in certain circumstances.

20.2.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered whether the proposed terms and conditions in Schedule 9 of the draft FADs will promote the LTIE.

Unnecessary or excessive creditworthiness information or security requirements could potentially delay or frustrate an access seeker's ability to acquire services, which may affect access seekers' ability to compete in the markets for telecommunication services. The ACCC does not consider the terms and conditions proposed in the schedule to be unnecessary or excessive to the extent that they would deter entry or hinder an access seeker's ability to compete in telecommunication markets.

Further, the ACCC considers that the proposed terms relating to the creditworthiness information and provision of Security by the access seeker minimise the financial risk of the access provider. This indirectly promotes the economically efficient investment in infrastructure because the access provider has greater assurance that it will recover the costs of its investment.

The ACCC considers that practical and functional creditworthiness and security terms will satisfy the objective of promoting competition by removing unnecessary barriers for access seekers, while providing protection for the access provider. The terms and conditions proposed by the ACCC at Schedule 9 effectively balance the interests of access seekers and the access providers.

The ACCC considers that proposed terms and conditions in Schedule 9 of the draft FADs do not concern the connectivity of telecommunication networks.

20.2.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The proposed terms and conditions in Schedule 9 of the draft FADs generally go to the access provider's legitimate business interest of conducting its business to a normal commercial standard and to protecting its financial risk.

There are a number of specific terms proposed in Schedule 9 which benefit the access provider. The provision of Security itself protects the access provider's interests in being paid for a debt due. Allowing the access provider to request security before all credit checks are completed benefits the access provider by not exposing it to the risk of default in the intervening period of supply.

The access provider's ability to request creditworthiness information from the access seeker, to receive it within a certain timeframe, and then require Security to be altered, further supports the legitimate business interests of the access provider.

The ACCC therefore considers that the proposed terms and conditions in Schedule 9 of the draft FADs benefit the legitimate business interests of a carrier or CSP by facilitating the management of financial risk, and protecting its commercial return on its investments.

20.2.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that the proposed terms and conditions in Schedule 9 of the draft FADs strike a balance between the interests of access seekers who have the right to use the declared service and access providers.

As noted above in section 20.2.1, the interests of all access seekers are supported because access is not conditional on the completion of credit checks or the provision of security. Such conditions would have potential to frustrate access and deter entry into telecommunication markets. Rather, the proposed terms specify that conditional access is to be requested in certain circumstances only. This could be when the access seeker first acquires the service and where it does not have a credit history, or when a subsequent event occurs that would give rise to genuine concerns around the access seeker's ability to pay its debts.

Further, the ACCC does not consider the timeframes related to creditworthiness information or Security to be onerous on access seekers to the extent that it would deter access seeker entry. The timeframes strike a balance between enabling an access seeker to develop and conduct its business operations, and the access provider's interest in managing financial risk.

The proposed terms and conditions also provide for the access seeker to reduce its Security where the access seeker can demonstrate an improvement in the creditworthiness or a material change in circumstances. Such credit reviews have the potential to free up working capital for the access seeker. This counterbalances the lack of incentive for the access provider to reduce Security requirements for its downstream competitors.

For these reasons, the ACCC considers that the proposed terms and conditions in Schedule 9 of the draft FADs accommodate the interests of all persons who have the right to use the declared service.

20.2.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The creditworthiness and security proposed terms and conditions in Schedule 9 of the draft FADs will not impact the direct costs of providing access to the declared services, as they do not contribute to those costs. Indirectly, the protections afforded to the access provider by the proposed terms mean that any direct costs incurred are likely to be recovered.

20.2.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions in Schedule 9 of the draft FADs will not affect the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else because this schedule does not refer to the value of network enhancements.

20.2.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms proposed terms and conditions in Schedule 9 of the draft FADs will not affect operational and technical requirements necessary for the safe and reliable operation of a carriage service, as they do not address operational and technical requirements.

20.2.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions proposed in Schedule 9 of the draft FADs will not affect the economically efficient operation of a carriage service, as they do not impact on the ability of the access provider and access seeker to operate their respective services, networks and facilities in an economically efficient manner.

20.3 *General dispute resolution procedures*

The proposed terms regarding the general dispute resolution procedures (as distinct from the billing dispute procedures in Schedule 8) are set out in Schedule 10 of the draft FADs.

20.3.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC does not consider that the terms and conditions proposed in Schedule 10 of the draft FADs directly impact on the promotion of the LTIE considering the objectives of promoting competition, achieving any-to-any connectivity, and the objective of encouraging the economically efficient use of, and the economically efficient investment in infrastructure.

In respect of promoting competition, the proposed terms and conditions do not deal explicitly with substantive issues regarding access to listed services. However, any disputes about access may be dealt with under the schedule.

In terms of any-to-any connectivity, the proposed terms and conditions do not deal directly with the connectivity of telecommunication networks. In relation to the objective of encouraging the economically efficient use of, and the economically efficient investment in infrastructure, the proposed terms and conditions do not deal directly with issues that would impact on the efficient use of the infrastructure or with incentives for investment in infrastructure.

Indirectly however, the LTIE is promoted by having defined dispute resolution procedures. Such procedures can reduce the time and expense of dispute resolution for all parties. Having a well defined and balanced dispute resolution process is important. If the process provides too much discretion to the access provider, it can undermine the operation of the other terms and conditions.

20.3.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC is of the view that the general dispute resolution procedures strike a balance between the legitimate business interests of the access provider and the

interests of the access seeker. The procedures, obligations and rights proposed in Schedule 10 of the draft FADs apply equally to both access providers and access seekers.

The terms and conditions proposed in Schedule 10 of the draft FADs will benefit both the legitimate business interests of the access provider and access seeker, as it encourages dispute resolution procedures which are simple, flexible, quick and inexpensive. This prevents undue reliance on legal proceedings or arbitration.

The ACCC considers this to be in the legitimate business interests of the access provider and access seekers. It does not unduly constrain their ability to conduct overall business operations by ensuring that any non-billing disputes are resolved expeditiously. The ACCC considers it is the mutual interests of both the access provider and access seeker to have certainty about processes regarding dispute resolution.

Further, equal representation at the mediation is possible, and is required in relation to the Expert Committee. Each party is also required to bear its own costs of mediation and the expert committee, and share the costs of the mediator or the independent member of the expert committee. In this way, the terms clearly do not place an unreasonable share of the costs on one party.

20.3.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

For the reasons set out at 20.3.2, the ACCC is of the view that dispute resolution procedures benefit both the legitimate interests of the access provider and the interests of the access seekers who have the right to use the declared service.

20.3.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that the proposed terms and conditions at Schedule 10 of the draft FADs do not affect the direct costs of providing access to the declared services, as they do not directly contribute to the costs of providing access to the declared service.

20.3.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions at Schedule 10 of the draft FADs will not affect the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else because this schedule does not refer to the value of network enhancements.

20.3.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 10 of the draft FADs will not affect operational and technical requirements necessary for the safe and reliable operation of a carriage service.

20.3.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 10 of the draft FADs will not affect the economically efficient operation of a carriage service, as they do not impact on the ability of the access provider and access seeker to operate their respective services, networks and facilities in an economically efficient manner.

20.4 Confidentiality provisions

The proposed terms regarding use and protection of confidential information are set out in Schedule 11 of the draft FADs.

20.4.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that that the proposed terms and conditions at Schedule 11 of the draft FADs will promote the LTIE. Proposed Schedule 11 protects the confidential information of both access seekers and access providers from unauthorised use by the other party. Under the proposed terms and conditions, parties are not able to use confidential information inappropriately to gain a competitive advantage in downstream markets.

The ACCC considers that the proposed terms and conditions do not have an effect on any-to-any connectivity, because they concern the use of information only.

Access seekers are more likely to make efficient investments in infrastructure knowing that their confidential information is protected and will not be used by the access provider to gain a competitive advantage to the detriment of the access seeker. This will ensure that the access seeker and access provider are competing on a level playing field in downstream markets.

20.4.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC considers that to the proposed terms and conditions in Schedule 11 service the legitimate business interests of the access provider. If the confidential information of the access provider is not properly protected, the access provider may suffer losses. These proposed provisions help to prevent that loss.

20.4.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that the proposed terms and conditions at Schedule 11 of the draft FADs serve the interests of access seekers. They help to protect the confidential information from misuse by the access provider by outlining procedures for handling confidential information. The confidential information that is provided by access seekers when provisioning services is potentially very valuable. Protecting that information from misuse is in the access seekers interests and the ACCC has taken this into account in proposing the terms and conditions at Schedule 11 of the draft FADs.

20.4.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC understands that the confidentiality provisions proposed in Schedule 11 may require an access provider to develop systems to comply with the provisions, as was noted in the 2008 Model Terms.²⁷¹ The ACCC considers that any costs associated with this development are not unreasonable given the necessity of protecting confidential information. In proposing the terms and conditions at Schedule 11 of the draft FADs, the ACCC considers that it has struck the right balance between imposing additional costs and protecting the interests of access seekers.

20.4.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that this criterion is not relevant because the proposed terms and conditions at Schedule 11 of the draft FADs only include processes for confidentiality, not any network enhancements.

20.4.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that this criterion is not relevant because the proposed terms and conditions at Schedule 11 of the draft FADs do not have implications for the safe and reliable operation of the network.

20.4.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 11 of the draft FADs promote the economically efficient operation of a carriage service by outlining procedures for secure information sharing. Without the fear of confidential information being disclosed, parties are able to candidly share information necessary for the provision of services.

20.5 *Communications with end user*

The proposed terms regarding access provider and access seeker communications with end users are set out in Schedule 12 of the draft FADs.

20.5.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The provisions proposed at Schedule 12 of the draft FADs promote the LTIE as they aim to ensure that all service providers represent themselves and their services fairly and accurately when dealing with end users. The ACCC is of the view that the proposed provisions give all service providers, including the access provider and access seekers, an equivalent opportunity to win and retain customers.

The proposed provisions promote competition because they provide assurance against inappropriate and misleading marketing, which is to the detriment of all end-users. By

²⁷¹ 2008 Model Terms, p. 25.

providing that marketing to end-users will be done fairly and transparently, both the access provider and access seeker are more likely to undertake efficient investment in infrastructure in order to provide additional services, and goods and services of a higher quality.

20.5.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has taken into account the legitimate business interests of a carrier in incorporating the proposed terms and conditions at Schedule 12 of the draft FADs.

The proposed provisions place limitations on the ability of access seekers to engage in misleading conduct or blame the carrier for faults or maintenance in the network. This ensures that the business interests and reputation of the carrier is protected.

Furthermore, the proposed Schedule 12 provisions aim to give all access seekers, carriers and carriage service providers an opportunity to win new customers, enabling them to compete fairly for customers and earn a commercial return on investment.

20.5.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The proposed terms and conditions at Schedule 12 of the draft FADs place limits on the marketing strategies that can be employed by access providers, and therefore take into account the interests of all persons who have rights to use the declared service.

An access provider can only communicate and deal with the access seeker's customers in limited circumstances, such as in relation to goods and services that the access provider currently supplies or previously supplies to that end user, where it is necessary to communicate with the end-user to provide wholesale services, or in the case of emergency. The provisions therefore give access seekers some assurance that the access provider will not use its control over the network to 'win back' end user customers.

20.5.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC has taken into account the direct costs of providing access to the declared service when including the proposed terms and conditions at Schedule 12 of the draft FADs. The proposed provisions concerning when and how a service provider can communicate with end-users do not impose significant additional cost on service providers. This is also the case for the proposed provisions which specify how an access provider should deal with enquiries from an end user where that enquiry should be directed to an access seeker.

Schedule 12 also contains a proposed term requiring a party that communicates with the end-user of another party to, where practicable, make and maintain records of that communication. The ACCC is cognisant that this requirement may impose additional administrative costs on service providers. However, the ACCC is of the view that it is important that records be maintained of each contact that occurs to provide assurance that such contact is appropriate.

By requiring service providers to maintain records of such communications in certain instances, the ACCC considers that it has balanced the additional cost on service

providers with some protection for access seekers to confirm that contact with end-users is made for the right purposes.

20.5.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else, is not relevant to the proposed terms and conditions at Schedule 12 of the draft FADs, as these relate to the circumstances under which the access provider and access seekers may deal and communicate with end-users.

20.5.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 12 of the draft FADs do not impact on the safe and reliable operation of a carriage service as they relate to the circumstances under which the access provider and access seekers may deal and communicate with end-users.

20.5.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 12 of the draft FADs are not overly burdensome and do not hinder the efficient operation of a carriage service. The provisions relating to record keeping are only applicable where systems to record communications are practically available to the party making contact with the end-user.

20.6 *Network modernisation and upgrade provisions*

The proposed terms regarding upgrading of the access provider's network are set out in Schedule 13 of the draft FADs.

20.6.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

It is the ACCC's view that the network modernisation and upgrade provisions made in a number of Final Determinations in April 2010 in various ULLS and LSS access disputes promote the LTIE.²⁷² The ACCC has taken the LTIE into account when including these proposed terms at Schedule 13 of the draft FADs.

The ACCC realises that undertaking network upgrades is important to supply new services and improve the quality of existing services. Upgrades will also be undertaken to upgrade old or outdated equipment in order to improve the efficiency with which existing services are provided. Such changes have a direct and positive impact on the overall efficiency of the network and the LTIE.

By specifying minimum notification requirements in the FAD, access seekers will have access to relevant information so they can make informed business decisions

²⁷² See <http://intranet.accc.gov.au/content/index.phtml/itemId/715206> for published determinations.

relating to the declared service. The ACCC considers that the proposed provisions strike an appropriate balance between the access provider's legitimate interests in upgrading its network and ensuring that access seekers are given sufficient time to incorporate knowledge of any such upgrade into their planning and investment decisions.

If the notification time is unduly limited, access seekers face the increased risk of stranding investments and potentially losing customers. Conversely, if the timeframe is too long, the access provider's ability to upgrade and invest in its network will be constrained. The ACCC considers that the network modernisation and upgrade terms proposed at Schedule 13 of the draft FADs will ensure that the access provider's legitimate commercial interests are protected by being able to invest efficiently.

The ACCC considers that it has found a balance between the interests of the access provider and access seekers that will result in sufficient time to migrate customers' services from the existing platform to an alternative. This will ensure ongoing any-to-any connectivity for customers and ultimately promote the LTIE.

20.6.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has taken into account the access provider's legitimate business interests when including the proposed terms and conditions at Schedule 13 of the draft FADs. In particular, the ACCC has considered the practical implications of the notification requirements and the timing of those notifications. The ACCC is of the view that those requirements are appropriate in commercial or business terms and promote the necessary level of certainty to allow efficient investment by the access provider in the infrastructure supporting the declared fixed line services.

20.6.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has had regard to the interests of wholesale customers, access seekers and end-users in proposing the terms and conditions at Schedule 13 of the draft FADs. The ACCC has given weight to access seekers' legitimate interests of being informed of planned upgrades and consulted on how a network upgrade is to be implemented. The ACCC has taken these factors into account in determining the appropriate notification obligations on the access provider.

The ACCC considers that the notice periods outlined in the proposed Schedule 13 take into account the interests of all persons who have the right to use the declared service and provide sufficient notification of upgrades.

20.6.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC has taken into account the impact of the network modernisation and upgrade provisions on the costs of providing access to the declared service. The ACCC is of the view that the additional cost incurred by the access provider in providing the information under the proposed notification requirements will be minimal, and the access provider is likely to have access to the required information under the prescribed notice period.

In addition, the ACCC considers that the benefits of providing the information in the required notices outweigh the costs of doing so.

20.6.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else, is not relevant to the proposed terms and conditions at Schedule 13 of the draft FADs as they relate primarily to the provision of information.

20.6.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The proposed terms and conditions at Schedule 13 of the draft FADs include obligations on the access provider to notify certain parties in the event of an emergency. The ACCC considers that including these terms in the draft FADs takes into account the operational and technical requirements necessary for the safe and reliable operation of a carriage service. By including these proposed terms, the ACCC has ensured that the access provider can undertake the most appropriate repairs in an emergency situation and use its best endeavours to provide access seekers with notification of the network modernisation or upgrade prior to implementation.

20.6.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the economically efficient operation of carriage services and associated networks of the access provider and access seekers will be encouraged by access seekers having greater available information available to assist in making investment decisions. This is because it will remove information asymmetry which may deter investment.

20.7 *Suspension and termination*

The proposed terms regarding suspension and termination of services are set out in Schedule 14 of the draft FADs.

20.7.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered the LTIE in determining the suspension and termination provisions proposed in Schedule 14 of the draft FADs.

The ACCC recognises that an access provider needs the power to suspend a service during an emergency or when there is a threat to the safety of persons or network security, such as make occur during bushfires. Preventing an access provider from being able to take this action would clearly not be in the LTIE. The suspension and termination provisions ensure that the access provider is able to take steps to protect its network during an emergency. Allowing the access provider to take steps to maintain the quality and availability of its network for end users is clearly in the

LTIE. Access providers are more likely to undertake efficient investment in infrastructure if they are allowed to protect their investment when it is potentially under threat.

The interests of the access seekers have also been taken into account given that any suspension under the emergency provisions may only be maintained until (as each case requires) the relevant emergency or threat has passed.

In non-emergency situations, the access provider may only suspend the service of an access seeker once it has given notice of its intention to suspend the service to the access seeker. These proposed provisions are likely to encourage investment in infrastructure and are therefore in the LTIE, because access seekers have an assurance that their service will not be indiscriminately suspended or terminated for trivial matters.

The ACCC considers that the proposed suspension and termination provisions at Schedule 14 of the draft FADs are not relevant to the objective of any-to-any connectivity as they do not affect the ability of an end-user who is supplied with a carriage service to communicate, by means of that service, with each other end-user who is supplied with the same or similar service.

20.7.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has taken into account the legitimate business interests of the access provider when including the proposed terms and conditions at Schedule 14 of the draft FADs. The suspension and termination provisions are important for the access provider as they are a means by which it can protect its legitimate business interests in being paid for the services it provides. Additionally, the provisions provide the access provider with the comfort that it can protect its network during an emergency, or in circumstances where it is of the opinion that an access seeker's network threatens the normal operation of its own.

20.7.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has also taken into account the interests of other parties when including the proposed terms and conditions at Schedule 14 of the draft FADs. The interests of access seekers have been addressed, because the provisions ensure that their businesses are not disrupted for trivial matters. In situations where an access seeker is in breach of an access agreement, the proposed terms at Schedule 14 protect the interests of access seekers by providing that the access provider can only suspend or terminate a service after giving notice of its intention to do so and providing an opportunity for the breach to be remedied. This ensures that a service will not be unreasonably interrupted.

20.7.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

Providing access to a declared service imposes direct costs on the access provider. The ACCC has had regard to these costs in including the proposed terms and conditions at Schedule 14 of the draft FADs. Proposed Schedule 14 provides a means by which the access provider may suspend or terminate a service of an access seeker

in specific circumstances. This allows the access provider to protect itself from an access seeker that is not paying its bills.

The proposed provisions also provide some protection for access seekers where the service has been terminated. An access provider must refund to an access seeker a fair and equitable proportion of those sums paid under the FADs for a period extending beyond the date on which the supply of the service has been terminated.

The proposed terms and conditions at Schedule 14 of the draft FADs therefore balance the interests of all parties in relation to the costs associated with access to the declared fixed line service.

20.7.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions at Schedule 14 of the draft FADs do not concern the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else. This is because the provisions relate to the circumstances under which an access provider may suspend or terminate a service, rather than the circumstances under which a party may recover costs relating to network enhancements.

20.7.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The proposed terms and conditions at Schedule 14 of the draft FADs allow the access provider to suspend a service in the event of an emergency. The ACCC considers that these proposed provisions take into account the operational and technical requirements necessary for the safe and reliable operation of a carriage service. By including these terms, the ACCC has ensured that the access provider can suspend a service in an emergency situation or when it considers that its network is at risk.

20.7.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The proposed provisions at Schedule 14 of the draft FADs allow an access provider to suspend the supply of a service when its network is at risk or the access seeker has failed to pay money owing or has otherwise breached its obligations under the FADs. The ACCC considers that these proposed provisions encourage and support the economically efficient operation of carriage services and associated networks of the access provider and access seekers. It is not economically efficient for an access provider to be required to supply a carriage service where an access seeker is consistently defaulting on payment.

20.8 *Changes to operating manuals*

Schedule 15 of the draft FADs contain proposed terms and conditions relating to changes to the ULLS operating manuals by the access provider.

20.8.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that the proposed terms and conditions at Schedule 15 of the draft FADs do not have direct implications for the promotion of competition or any-to-any connectivity.

However, the proposed provisions do help to promote the efficient use of and investment in infrastructure. This is because the proposed provisions set out a clear process for an access provider to amend the operations manuals and alter its network without undue constraint from access seekers. The proposed provisions also require the access provider to give access seekers adequate notice regarding these changes, assisting access seekers in planning efficient investment in their own equipment. This may, in turn, promote competition in downstream markets.

20.8.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC considers that the proposed terms and conditions at Schedule 14 of the draft FADs may promote the legitimate business interests of the access provider. These proposed terms and conditions allow the access provider to alter its network, where necessary, without the risk that access seekers may argue that there has been a breach or change in service levels, or otherwise inappropriately constrain investment.

20.8.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The proposed terms and conditions at Schedule 15 of the draft FADs will likely affect the interests of persons with rights to use the declared service. The ACCC noted in the 2008 Model Terms that ‘operating manuals can dictate the precise way in which a core service can be accessed, and so require an access seeker to develop its systems and processes so that the access seeker can act consistently with them.’²⁷³ Changes to the operating manuals can therefore affect an access seeker’s interests in the service in a range of ways.

The rights of access seekers must be balanced against the need for the access provider to be able to properly manage its network. The ACCC considers that the proposed provisions balance these competing interests accordingly by allowing the access provider to make changes to operating manuals with sufficient notice to access seekers.

20.8.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that the proposed terms and conditions at Schedule 15 of the draft FADs are not relevant to the direct costs of providing access to the declared service.

²⁷³ 2008 Model Terms, p. 38.

20.8.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions at Schedule 15 of the draft FADs are not relevant to the cost recovery of extensions or enhancements.

20.8.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 15 of the draft FADs aid the operation and technical requirements necessary for the safe and reliable operation of a carriage service by allowing the access provider the ability to ‘alter its operations in order to properly manage its network.’²⁷⁴ This will also indirectly benefit access seekers, by helping to ensure that the available network capability is efficiently utilised.

20.8.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the proposed terms and conditions at Schedule 15 of the draft FADs promote the economically efficient operation of a carriage service by enabling the access provider to make changes that are necessary for the efficient operation and modification of its network. For examples changes could be made that take account of advances in technology which will make the network more efficient.

20.9 *Ordering and provisioning*

The proposed terms regarding ordering and provisioning for ULLS and LSS are set out in Schedule 16 of the draft FADs.

20.9.1 Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that the proposed terms and conditions at Schedule 16 of the draft FADs promote competition in the markets for carriage services, including both voice and broadband/DSL services. This is because these processes more readily allow parties to expand their networks to provide services using the LSS and the ULLS.

The availability of a migration process from LSS to ULLS can be expected to reduce obstacles to end-users gaining access to the naked digital subscriber line (DSL) service, thereby creating greater consumer choice and promoting competition. In the absence of a LSS to ULLS migration process, access seekers (and hence end-users) incur the costs of an inefficient process that disconnects the LSS before re-connecting the ULLS. This causes outages of broadband supply, higher costs, and hampers competition for voice and broadband services.

The ACCC considers that competition improvements may be limited if parties do not take up the migration process. However, as LSS take-up increases and naked DSL and

²⁷⁴ 2008 Model Terms, p. 38.

VoIP become viable alternatives to PSTN voice services, the competition benefits of a migration process would become more pronounced.

Accordingly the ACCC's view is that the establishment of a LSS to ULLS migration process will be likely to promote competition, as the costs of moving from LSS-based supply to ULLS-based supply would more closely reflect an efficient process.

The approach to these processes will not affect any-to-any connectivity.

The ACCC considers that similar considerations to competition effects apply to the economically efficient use of infrastructure. The greater competition across voice and broadband services, stemming from an efficient migration process, will encourage parties to utilise their DSLAM infrastructure more efficiently.

Economic efficient investment in infrastructure is also likely to be support by efficient connection processes, which will in turn encourage parties to invest in exchange-based infrastructure capable of providing voice and broadband services. In relation to the existing CAN infrastructure, the ACCC considers that as long as the provider recovers its costs for connection work carried out, it should continue to receive appropriate incentives for investment in its infrastructure.

20.9.2 Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC considers that the access provider's legitimate business interests would benefit from the efficient migration processes proposed at Schedule 16 of the draft FADs, because it would not require technicians and contractors to perform unnecessary work.

20.9.3 Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The proposed provisions in Schedule 16 of the draft FADs enable ULLS and LSS access seekers to take up processes which will minimise service downtime experienced by end-users involved in the churn process. The current two stage process for migration from LSS to ULLS (involving disconnection of the LSS and then reconnection of the ULLS) is inefficient, and contrary to the interests of access seekers. If migration charges continue to be based on the existing inefficient process, the access provider will have less incentive to seek out cost reductions that are open to it. This will result in access seekers continuing to face excessive charges.

20.9.4 Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that proposed terms and conditions at Schedule 16 of the draft FADs are not relevant the direct costs of providing access to the declared service.

20.9.5 Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the proposed terms and conditions at Schedule 16 of the draft FADs are not relevant to this criterion because they do not relate to network extensions, only to processes for the migration and provision of services.

20.9.6 Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that this criterion is not relevant to the proposed terms and conditions at Schedule 16 of the draft FADs.

20.9.7 Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

In the context of the proposed terms and conditions at Schedule 16 of the draft FADs, consideration must be given to the effectiveness of these processes and the resulting effect on competition.

The ACCC considers that a LSS to ULLS migration process is necessary as dynamic efficiencies are more strongly encouraged and more downstream services will be likely to fall within the ambit of the process. This will reduce obstacles to a wide class of end-users gaining access to competing services, thereby promoting competition and dynamic efficiencies.

Productive efficiency gains will be realised as further encouragement is given to service providers to participate in the migration process. Allocative efficiency will also increase as more service providers participate in the migration process. The ACCC considers that the proposed terms and conditions in Schedule 16 of the draft FADs will promote the economically efficient operation of the network.

Part C: Geographic exemptions

Key points:

- The ACCC proposes to incorporate the effect of the exemption determinations made under the previous Part XIC access regime into the FADs for the WLR, LCS and PSTN OA services.
- This Part C outlines issues and calls for submissions regarding whether to incorporate the effect of the exemption determinations made under the previous Part XIC access regime into the FADs for the WLR, LCS and PSTN OA services.

21 Background

21.1 Legislative changes

The CACS Act repealed the ordinary individual and ordinary class exemption provisions of the CCA.²⁷⁵

The transitional provisions in the CACS Act state that once an AD in relation to a declared service commences, a determination made under the ordinary exemption provisions in relation to that service ceases to have effect.²⁷⁶

Before the IADs commenced on 1 January 2011, there were eight exemption determinations which affected the WLR, LCS and PSTN OA services:

Tribunal's Metropolitan Orders

- Tribunal's 2009 WLR Individual Exemption Order made on 24 August 2009
- Tribunal's 2009 LCS Individual Exemption Order made on 24 August 2009
- Tribunal's 2009 PSTN OA Individual Exemption Order made on 9 September 2009 (in relation to the supply of the PSTN OA in metropolitan ESAs)

PSTN OA CBD Orders

- ACCC's Individual Exemption Order No. 6 of 2008 made on 30 October 2008, affirmed and varied by the Tribunal's 2009 PSTN OA CBD Individual Exemption Order made on 9 September 2009 (in relation to the supply of the PSTN OA in 17 CBD ESAs)

ACCC's Class Orders

- ACCC's Class Exemption Determination No. 2 of 2008 made on 22 August 2008 (in respect of the WLR)²⁷⁷
- ACCC's Class Exemption Determination No. 1 of 2008 made on 22 August 2008 (in respect of the LCS)²⁷⁸

²⁷⁵ Repealed sections 152AT (individual exemptions) and 152AS (class exemptions) of the TPA.

²⁷⁶ Items 202 (class exemptions) and 203 (individual exemptions) of the CACS Act.

²⁷⁷ This determination was subsequently varied by the ACCC's Class Exemption (Variation) Determination No. 1 of 2009.

- ACCC's Class Exemption Determination No. 3 of 2008 made on 29 October 2009 (in respect of the PSTN OA)²⁷⁹

(together, the Exemption Determinations).²⁸⁰

The Exemption Determinations ceased to have effect from 1 January 2011 after the IADs took effect.

Under the new regime, the ACCC is able to incorporate provisions in access determinations which provide that any or all of the SAOs are not applicable to a carrier or CSP. This may be either unconditional or subject to such conditions or limitations as are specified in the determination.²⁸¹

21.2 IADs incorporated the effect of the Exemption Determinations

The ACCC decided to incorporate the effect of the Exemption Determinations into the IADs for the WLR, LCS and PSTN OA services. Therefore, the effect of the Exemption Determinations continues under those IADs. The ACCC considered that this would promote regulatory consistency in the transition to the new access regime and is also consistent with the Tribunal's assessment that the Exemption Determinations in relation to those services were in the LTIE. To do otherwise would have effectively led to the 're-regulation' of those services in the exempt ESAs without a detailed consideration of whether 're-regulation' was appropriate.

When it released the IADs, the ACCC noted that it would consult with industry on the incorporation of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services.

21.3 Making the Exemption Determinations

Following a period of consultation, the ACCC made ordinary individual exemption orders in respect of the WLR, LCS and PSTN OA services in certain metropolitan ESAs, and PSTN OA services in CBD ESAs, subject to certain conditions and limitations. These orders were made in August 2008 (for WLR and LCS) and October 2008 (for PSTN OA).²⁸²

The ACCC also made ordinary class exemptions orders under repealed section 152AS of the TPA in substantively the same terms as the individual exemption orders.²⁸³ The effect of the class orders was to make the exemption apply to all access providers (not just Telstra, who lodged the individual exemption applications).

²⁷⁸ This determination was subsequently varied by the ACCC's Class Exemption (Variation) Determination No. 2 of 2009.

²⁷⁹ This determination was subsequently varied by the ACCC's Class Exemption (Variation) Determination No. 3 of 2009.

²⁸⁰ Copies of all the Exemption Determinations are available on the ACCC website: www.accc.gov.au.

²⁸¹ Paragraphs 152BC(3)(h) and (i) of the CCA.

²⁸² A copy of these orders can be found on the ACCC website: www.accc.gov.au.

²⁸³ ACCC's Class Exemption Determination No. 1 of 2008 made on 22 August 2008 (in respect of the LCS); ACCC's Class Exemption Determination No. 2 of 2008 made on 22 August 2008 (in respect of the WLR); ACCC's Class Exemption Determination No. 3 of 2008 made on 29 October 2009 (in respect of the PSTN OA). A copy of these orders can be found on the ACCC website: www.accc.gov.au.

Access seekers sought review of the ACCC's individual exemption orders by the Tribunal. In December 2008, the Tribunal set aside the ACCC's WLR and LCS exemption orders. Telstra then sought judicial review of the Tribunal's decision in the Full Federal Court and on 11 March 2009 the Court set aside the Tribunal's decision and remitted the matter back to the Tribunal for further hearing.

On 24 August 2009, the Tribunal handed down its final WLR and LCS individual exemption orders, subject to conditions and limitations which were different to those originally imposed by the ACCC.

On 9 September 2009, the Tribunal handed down its final PSTN OA individual exemption orders. The PSTN OA order with respect to metropolitan ESAs has conditions and limitations which are substantively identical to those specified for the Tribunal's WLR and LCS orders. The Tribunal's PSTN OA order with respect to the 17 CBD ESAs effectively affirmed the ACCC's original PSTN OA order with respect to CBD areas.

The Tribunal's Metropolitan Orders apply to a limited number of metropolitan ESAs (380 in total) which are listed in the orders (Attachment A ESAs). The Tribunal found that it was in the LTIE for each of those 380 Attachment A ESAs to become 'Exemption ESAs', but only once certain conditions and limitations were satisfied. The Tribunal's Metropolitan Orders set out a process for the ACCC to calculate which ESAs should be exempt at a specific point in time.

On 18 November 2009 the ACCC varied the ACCC's Class Orders in respect of the WLR, LCS and PSTN OA in order for the class exemption to mirror the terms and conditions in the Tribunal's orders made in relation to metropolitan and CBD ESAs.²⁸⁴

21.4 Content of the Tribunal's Metropolitan Orders

The Tribunal's Metropolitan Orders provide that any of the 380 Attachment A ESAs may become an 'Exemption ESA' if all of the following three conditions are met:

- the ESA has three or more ULLS-based competitors (excluding Telstra)
- the ULLS-based competitors have an aggregate market share in the ESA equal to or greater than 30 per cent, and
- the aggregate ULLS spare capacity for that ESA is equal to or greater than 40 per cent of the aggregate number of WLR SIOs in that ESA.

Once an ESA is determined to be an Exemption ESA, it is still subject to further conditions and limitations before the exemption takes effect. In summary, the Tribunal's Metropolitan Orders specify that the exemption will either not have effect in an ESA or not apply to specific access seekers in an ESA, in the event that (capitalised terms are defined in the Tribunal's Metropolitan Orders):

- (a) an access seeker is a Queued Access Seeker in that Exemption ESA as at 30 September 2009

²⁸⁴ ACCC's Class Exemption (Variation) Determination No. 2 of 2009 (in relation to LCS); ACCC's Class Exemption (Variation) Determination No. 1 of 2009 (in relation to WLR); ACCC's Class Exemption (Variation) Determination No. 3 of 2009 (in relation to PSTN OA). These determinations can be found on the ACCC's website: www.accc.gov.au.

- (b) an exchange is a Capped, Potentially Capped or Constructively Capped Exchange²⁸⁵
- (c) Telstra ceases to supply the ULLS in that ESA, whether to itself or to another person
- (d) the supply by Telstra of the WLR, LCS or PSTN OA service to an access seeker is under an agreement that was in force between the access seeker and Telstra as at 30 September 2009, for so long as the agreement remains in force, or
- (e) in respect of an end-user, who immediately before 30 September 2009 was supplied with a Bundled Fixed Voice and Broadband Service by the access seeker using the LSS, WLR and LCS supplied by Telstra, until a Prescribed LSS to ULLS Migration Process is established.

21.4.1 ACCC's calculation of Exemption ESAs

The Tribunal's Metropolitan Orders require the ACCC to determine which of the 380 Attachment A ESAs satisfy the conditions in the orders to become Exemption ESAs by completing the following steps:

Step 1: collecting ULLS spare capacity information

The ACCC is required to identify competitors within the Attachment A ESAs who have a ULLS-based presence (i.e. who acquire the ULLS from Telstra), and collect from these competitors:

- the number of DSLAMs installed, and
- the DSLAM spare capacity,

in each of the Attachment A ESAs in which the competitors have a ULLS-based presence. This information is collected on a six-monthly basis (current as at 30 March and 30 September each year).

The ULLS-based competitors are not required to provide the ULLS-spare capacity information to the ACCC. However, if they do not provide this information, the Tribunal's orders require the ACCC to 'deem' the DLSAM spare capacity of those competitors using a deeming formula contained in the orders.

Step 2: collecting WLR SIO and CAN RKR data

Telstra is required to submit to the ACCC the number of WLR SIOs in each Attachment A ESA at six monthly intervals (current as at 30 March and 30 September each year). The ACCC also uses Telstra's CAN RKR data to undertake the exemption calculations.

Step 3: calculating the Exemption ESAs

The ACCC must then use the collected information, together with Telstra's CAN RKR data, to calculate (using the formula set out in the orders) which Attachment A ESAs satisfy the three conditions to become Exemption ESAs.

²⁸⁵ Constructively Capped Exchange - an exchange in respect of which the ACCC has determined that Telstra requires, as a condition of access, that the access seeker undertake works at their own expense which are out-of-the-ordinary works.

Step 4: publishing the ‘Exemption ESA List’

Finally, the ACCC must publish on its website the list of those Attachment A ESAs are Exemption ESAs (called the ‘Exemption ESA List’).

Repeat on a six-monthly basis

The ACCC must repeat the four steps above on a six-monthly basis until the orders expire. The list of Exemption ESAs on the ACCC’s website must be revised and updated after each new calculation.

21.4.2 Commencement and expiry of exemptions

Under the Tribunal’s Metropolitan Orders, once an Exemption ESA is published on the ACCC’s website, the exemption in relation to that ESA comes into effect six months after the publication date. For example, the Exemption ESAs published by the ACCC on 30 December 2010 would actually become exempt from 30 June 2011.

Once an ESA becomes an Exemption ESA, it remains an Exemption ESA until the Tribunal’s Metropolitan Orders expire or until the relevant service declarations are revoked, whichever date is earlier. This is the case even if the ESA fails to meet any or all of the three conditions at a later date.

The Tribunal’s WLR and LCS orders were specified to expire on 24 August 2014, and the PSTN OA order was specified to expire on 9 September 2014.

21.5 Content of the PSTN OA CBD Orders

The Tribunal’s 2009 PSTN OA CBD individual exemption order affirmed the ACCC’s PSTN OA CBD individual exemption order, subject to a variation relating to the expiry date of the ACCC’s order.

The ACCC’s PSTN OA CBD individual exemption order exempted Telstra from the SAOs in respect of the supply of the PSTN OA within 17 CBD ESAs, subject to the following conditions and limitations:

- the exemption ceases to apply within an ESA from the date which Telstra first ceases to be an access provider of the ULLS within the relevant ESA, and
- the exemption will not apply in respect of PSTN OA provided under an agreement which is in force as at the commencement date of the order for so long as that agreement remains in force.²⁸⁶

The exemption commenced on 29 October 2009 and was expressed to expire on 9 September 2014, or upon the revocation of either the PSTN OA declaration or the ULLS declaration, whichever first occurred.

21.6 Content of the ACCC’s Class Orders

The ACCC’s Class Orders mirrored the operation of the Tribunal’s Metropolitan Orders and the PSTN OA CBD Orders. In effect, they made the exemption applicable to all access providers, not just Telstra. They were expressed to expire at the same time as the respective individual exemption orders.

²⁸⁶ ACCC’s Individual Exemption Order No. 6 of 2008.

21.7 Exemption calculations under the Tribunal's Metropolitan Orders

At the time of publishing this discussion paper, the ACCC has completed two rounds of exemption calculations required by the Tribunal's Metropolitan Orders. As the effect of the orders are incorporated into the IADs, the ACCC is required to continue to undertake the exemption calculations on a six-monthly basis while the IADs are in force.

First round of exemption calculations (March 2010)

The ACCC undertook its first round of exemption calculations using data current as at 31 March 2010. The ACCC calculated that 129 ESAs were Exemption ESAs at that point in time. The ACCC published that list of 129 Exemption ESAs on its website by 30 June 2010.

The exemption of these 129 ESAs took effect from 30 December 2010. As the IADs incorporated the effect of the Exemption Determinations, the exemption in relation to those 129 ESAs continued after the IADs commenced on 1 January 2011.

Second round of exemption calculations (September 2010)

The ACCC undertook its second round of exemption calculations using data current as at 30 September 2010. The ACCC calculated a total of 181 ESAs were Exemption ESAs at that date. An additional 52 new ESAs had satisfied the conditions in the Tribunal's Metropolitan Orders to become Exemption ESAs. The ACCC published the 52 new Exemption ESAs on its website by 30 December 2010.

Under the Tribunal's Metropolitan Orders, the exemption for the 52 new Exemption ESAs was to take effect from 30 June 2011. As the IADs for WLR, LCS and PSTN OA incorporate the effect of the Exemption Determinations, the exemption in relation to those additional 52 new ESAs will take effect from 30 June 2011 (if the IADs are still in force at that time).

22 Exemption Determinations and FADs

When the ACCC published the IADs, it indicated that it would consult with industry on whether or not the effect of the Exemption Determinations should be incorporated into the FADs for the WLR, LCS and PSTN OA services.

When making an FAD and deciding whether or not the effect of the Exemption Determinations should be incorporated into an FAD, the ACCC must have regard to criteria in subsection 152BCA(1) of the CCA, which includes the LTIE. The ACCC may also consider any other matters that it thinks are relevant, such as regulatory certainty and consistency.

The ACCC's evaluation of the exemptions against the relevant criteria is outlined in chapter 23 below.

In summary, it is the ACCC's preliminary view that effect of the Exemption Determinations should be incorporated into the FADs for the WLR, LCS and PSTN OA services for the following reasons:

- incorporating the effect of the Exemption Determinations into the relevant FADs is likely to promote the LTIE, and

- incorporating exemptions into the FADs in substantively similar terms to those contained in the Exemption Determinations will promote regulatory certainty and consistency.

Since the making of the IADs, the ACCC has received a number of complaints from access seekers that Telstra is seeking to charge prices in the exempt ESAs for the WLR, LCS and PSTN OA in excess of the prices contained in the IADs, despite Telstra having previously charged those prices in the exempt ESAs.

Complainants have argued that the NBN build and the passage of the CACS Act have meant that the notion of copper based infrastructure competition has been extinguished. As such, they argue that the rationale for exempting WLR, LCS and PSTN OA services in certain ESAs no longer exists.

Complainants have also argued that in the vast majority of exempt ESAs there is no alternative source of supply of the declared services; and that the prospect of such market entry has been extinguished by the NBN build.

Telstra has informed the ACCC that it continues to charge its previous commercially agreed prices of WLR, LCS and PSTN OA in the exempt ESAs.

The ACCC notes that in the current exempt ESAs, there are on average 5.4 ULLS-based competitors (excluding Telstra), many of which will be providing alternative fixed voice services to Telstra.²⁸⁷

The ACCC also notes that in 58 per cent of the current exempt ESAs, there is already enough spare DSLAM capacity installed to absorb *total* access seekers' WLR SIOs in that ESA. The spare capacity includes spare capacity on currently installed cards, not the total DSLAM spare capacity. Access seekers may invest in additional spare capacity by adding cards to their currently installed DSLAMs; or by installing additional DSLAMs.

To become an exempt ESA, access seekers must have reached a combined market share of 30 per cent.

There is also still a consistent trend of increasing ULLS SIOs within the 380 Attachment A ESAs, and there are alternative competitive networks existing within certain of the Attachment A ESAs (such as Optus's HFC network; which Optus uses to supply customers with, amongst other things, fixed voice services). While the ACCC is not aware of any of any alternative suppliers of the WLR service in the exempt footprint, it continues to make inquiries to obtain information about alternative suppliers of that service.

For the reasons outlined in section 22.1.1.2 below ('asset stranding'), the ACCC considers that the recent developments regarding the build of the NBN does not affect its preliminary view to incorporate the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services.

²⁸⁷ Telstra CAN RKR data, December 2010.

Questions

4. Should the effect of the PSTN OA CBD Orders (and the corresponding class order) be incorporated into the FAD for the PSTN OA service?
5. Should the effect of the Tribunal's Metropolitan Orders (and the corresponding class orders) be incorporated into the FADs for the WLR, LCS and PSTN OA services?
6. Are there alternative suppliers of the PSTN OA, LCS and WLR services in the Attachment A ESAs, or is there a prospect of such alternative suppliers entering the Attachment A ESAs? Please provide evidence to support your response.
7. Have recent developments with regards to the NBN build affected the rationale for the exemptions? If so, please provide evidence.
8. Is there any other information or matters that the ACCC should have regard to when deciding whether to incorporate the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services?
9. Please provide comments on the ACCC's preliminary consideration of the subsection 152BCA(1) criteria in respect of including the effect of the Exemption Determinations in the relevant FADs. Where necessary, please provide supporting materials for your comments.

22.1 Changes to the Tribunal's Metropolitan Orders

As noted above, it is the ACCC's preliminary view that the whole effect of the Exemption Determinations (in substantially the same terms) should be incorporated into the FADs for the WLR, LCS and PSTN OA services.

In implementing the Tribunal's Metropolitan Orders, the ACCC received informal industry feedback with regards to the practical workability of those orders. The ACCC considers that it may be desirable to make non-substantive amendments to the wording of those orders for the purpose of incorporating them into the FADs.

The ACCC's initial views on changes that should be made to the Tribunal's Metropolitan Orders are set out below.

22.1.1 Minimum characteristics for LSS to ULLS transfer

The Tribunal's Metropolitan Orders specify that an exemption will not have effect if in respect of an end-user, who immediately before 30 September 2009 was supplied with a Bundled Fixed Voice and Broadband Service by the access seeker using the LSS, WLR and LCS supplied by Telstra, until a 'Prescribed LSS to ULLS Migration Process' is established.²⁸⁸

The Tribunal's Metropolitan Orders require that the Prescribed LSS to ULLS Migration Process satisfy 'Minimum Characteristics'. One of the Minimum Characteristics is that "any period which an end-user is unable to receive a broadband service by means of the copper pair servicing the end-user's Standard Telephone Service by reason of that migration is no longer than three (3) hours or such other period determined by the Commission in an access arbitration".

²⁸⁸ Clause 6.8 of the Tribunal's Metropolitan Orders.

In 2010, the ACCC made FDs in a number of access disputes which specified that, as a minimum characteristic of a LSS to ULLS migration, the period in which a LSS to ULLS migration is performed will be no longer than four hours.²⁸⁹

The ACCC decided to incorporate the terms and conditions from the 2010 FDs in relation to LSS to ULLS transfer into the IADs for the ULLS and the LSS. That is, the IADs specify that the period in which a LSS to ULLS transfer is performed will be no longer than four hours.²⁹⁰

The ACCC has proposed to incorporate the ‘four hour’ migration period as a minimum condition in clause 16.21 of the draft FADs (attached at Appendix C). The ACCC considers that, if a four hour migration period is incorporated into the FADs, it would be desirable for the equivalent limitation in relation to exemptions to be consistent.

Question

10. Should the Minimum Characteristics set out in the Tribunal’s Metropolitan Orders be amended for the purpose of the FADs as follows:

“any period which an end-user is unable to receive a broadband service by means of the copper pair servicing the end-user’s Standard Telephone Service by reason of that migration is no longer than four hours or such other period determined by the Commission”

22.1.2 Reporting on the number of DSLAMs installed

The Tribunal’s Metropolitan Orders requested that ULLS-based competitors provide the ACCC with information on the ‘Number of DSLAMS installed’ in each Attachment A ESA.

Under the Tribunal’s Metropolitan Orders, this information was not actually used by the ACCC in order to calculate the Exemption ESAs.

The ACCC has received informal industry feedback that ULLS-based competitors should not be requested to report on the ‘Number of DSLAMs installed’ in each Attachment A ESA.

The ACCC proposes to revise the reporting requirements for the purpose of incorporating the Tribunal’s Metropolitan Orders into the FADs by deleting the request for the ‘Number of DSLAMs installed’ by ULLS-based competitors in each Attachment A ESA.

²⁸⁹ See final determination under section 152CP of the Trade Practices Act 1974 in relation to an ULLS access dispute between Chime Communications Pty Ltd and Telstra Corporate Limited, published on the ACCC’s website: <http://www.accc.gov.au/content/index.phtml/itemId/793062>.

²⁹⁰ See clause 16.20 in Schedule 16 of the IADs in relation to ULLS and LSS.

Question

11. For the purpose of incorporating the Exemption Determinations into the FADs, should the reporting requirements (in respect of each Attachment A ESA) be revised to no longer require ULLS-based competitors to submit information on 'Number of installed DSLAMs'?

22.1.3 Expiry date

The Tribunal's Metropolitan Orders (and the accompanying class exemption orders) were specified to expire on 24 August 2014 (WLR and LCS) and 9 September 2014 (PSTN OA), or at the same time the service declarations expire, whichever is earliest.

The ACCC's and the Tribunal's PSTN OA CBD Orders (and the accompanying class exemption order) were also specified to expire on 9 September 2014.

As noted above, the Exemption Determinations ceased to have effect from the date that the IADs took effect.

The ACCC is of the preliminary view that the effect of the Exemption Determinations in the FADs should expire on 24 August 2014 (for WLR and LCS) and 9 September 2014 (for PSTN OA), so as not to disrupt the Tribunal's Orders.

However, there may be a view that it will promote certainty and consistency for industry if the exemptions were to expire at the same time as the FADs expire on 30 June 2016.

The ACCC notes that the issue of whether to exempt the WLR, LCS and PSTN OA services from regulation in certain ESAs post-2014 can be considered through the declaration inquiry processes for the WLR, LCS and PSTN OA services. Those inquiries are expected to be completed by July 2014, just prior to the expiry date of the Tribunal's Metropolitan Orders and the PSTN OA CBD Orders.

Question

- 12.) If the Exemption Determinations are incorporated into the FADs for the WLR, LCS and PSTN OA services, should the exemptions expire on 24 August 2014 for the WLR and LCS services; and on 9 September 2014 for the PSTN OA service?

23 Consideration of Exemption Determinations against the subsection 152BCA(1) criteria

This chapter sets out the ACCC's consideration of whether the effect of the Exemption Determinations should be included in the FADs for the WLR, LCS and PSTN OA services.

For ease, a reference made in this chapter to the "Tribunal's Metropolitan Orders" also refers to the mirror ACCC Class Orders made in respect of the WLR, LCS and PSTN OA services. Similarly, reference to the "PSTN OA CBD Orders" also refers to the mirror ACCC Class Orders made in respect of the PSTN OA service in CBD ESAs.

When the ACCC and the Tribunal considered the WLR, LCS and PSTN OA metropolitan exemption applications under the previous Part XIC access regime, they were required to be satisfied that granting the exemptions (subject to conditions and limitations) would promote the LTIE.²⁹¹

When deciding whether or not the effect of the Exemption Determinations should be incorporated into the relevant FADs, the ACCC must have regard to criteria in subsection 152BCA(1) of the CCA, which includes the promotion of the LTIE. The ACCC may also consider any other matters that it thinks are relevant, such as regulatory certainty and consistency.

23.1 Paragraph 152BCA(1)(a) – Whether the determination will promote the LTIE

To consider whether incorporating the effect of the Exemption Determinations into the relevant FADs will promote the LTIE, the ACCC must have regard to the objectives listed in subsection 152AB(2) of the CCA (summarised in chapter 3 of this discussion paper).

23.1.1 Promoting competition

The ACCC must consider whether incorporating the effect of the Exemption Determinations in the FADs for the WLR, LCS and PSTN OA services is likely to promote competition in the relevant markets.

The ACCC considers that the concept of promoting competition refers to whether the opportunities and environment for competition will be better with the exemptions included in the FADs than they would be absent of the exemptions in the FADs, rather than to whether competition will in fact "increase".²⁹²

To assess the promotion of competition objective, it is useful to undertake the following three step analysis:

- I. identify those markets that would be affected by the granting of exemptions
- II. assess the state of competition within those markets

²⁹¹ Repealed section 152AT of the TPA (now referred to as the CCA).

²⁹² See *Sydney International Airport* [2000] ACompT 1 at [106] and *Seven Networks Limited (no 4)* [2004] ACompT 11 at [123]-[124]; *Application by Chime Communications Pty Ltd (No 2)* [2009] ACompT 2.

- III. assess whether price and service offerings to consumers in those markets are likely to be better by including the effect of the Exemption Determinations in the FADs for WLR, LCS and PSTN OA.

23.1.1.1 Relevant markets

To assist in determining the impact of including the effect of the Exemption Determinations in the FADs, the ACCC needs to identify the relevant markets and assess the likely effect of its decision on the promotion of competition in each market. Substitution is the key to market definition.²⁹³

The approach to market definition set out in the *ACCC's Merger Guidelines 2008* focuses on two key dimensions of substitution: the product dimension and the geographic dimensions. The ACCC focuses on the foreseeable future when considering the likely product and geographic dimensions of a market.

The ACCC is of the view that Part XIC of the CCA does not require it to precisely define the scope of the relevant markets for the purpose of assessing the inclusion of the exemptions in the FADS.

ACCC's 2008 view on the relevant markets

Product dimension

In 2008 the ACCC considered that the relevant markets for assessing the exemption applications could be broadly described as:²⁹⁴

- retail voice markets: retail markets for the supply of a bundled of fixed voice services to consumers (excluding carrier-grade and application layer VoIP and mobile services)
- wholesale voice markets: wholesale markets for the supply of fixed voice services to access seekers via re-sale (LCS, WLR, PSTN OA or similar services) and “access based” supply (via the use of a DSLAM or multi-service access node (MSAN) in conjunction with the ULLS)
- retail bundled broadband and voice markets: retail markets for the supply of bundled broadband and voice services over copper (xDSL), hybrid fibre-coaxial (HFC), or possibly, as a weaker substitute, wireless technologies, and
- wholesale bundled broadband and voice markets: wholesale markets for the supply of bundled broadband and voice services to access seekers via re-sale and “access based” supply (via the use of a DSLAM or MSAN in conjunction with ULLS, LSS or possibly USS²⁹⁵).

The ACCC noted that consumers were increasingly acquiring a bundle of fixed voice services from one provider. The ACCC was of the view that it was appropriate to

²⁹³ See s 4E of the CCA.

²⁹⁴ ACCC, *Telstra's local carriage service and wholesale line rental exemption applications, Final Decision and Class Exemption* (Public version), August 2008 (ACCC LCS and WLR Decision), pp. 58-59; ACCC, *Telstra's PSTN Originating Access exemption applications – CBD and Metropolitan areas, Final Decision and Class Exemption* (Public version), October 2008 (ACCC PSTN OA Decision), pp. 74-75.

²⁹⁵ Upper spectrum sharing service (USS) refers to negotiating to share the upper spectrum of a ULLS-line acquired by a third party.

include basic access, local calls, national and international long distance calls and fixed to mobile calls within the bundle.²⁹⁶

The ACCC did not consider that carrier-grade or application layer VoIP services were substitutable for PSTN fixed voice services based on a range of factors including differences in the quality of services and the necessity of having a broadband service.²⁹⁷

The ACCC considered that mobile services were only in relatively small percentage of cases effectively substitutable for fixed line services on the demand side. On the supply side, the ACCC found that mobile service providers were unlikely to switch to the provision of voice services in the event of a small but significant non-transitory increase in price (or SSNIP).²⁹⁸

The ACCC considered that the effect of the exemption should also be assessed in the downstream bundled fixed voice and broadband market.²⁹⁹ This is because granting the exemptions could impact upon the ability of LSS acquirers to acquire a LCS/WLR service over the same copper line.

Geographic dimension

The ACCC adopted the ESA as the basic geographic unit in its competition analysis at both the wholesale and the retail level. The ACCC considered that this delineation reflected, as accurately as possible, the actual level of competition in the provision of services compared to the broader delineations between different geographic levels such as between CBD, metropolitan and regional areas.

Tribunal's view on the relevant market

Product dimension

The Tribunal's market definition for the purpose of assessing the exemption applications was broadly the same as the ACCC's market definition.³⁰⁰

The Tribunal considered that resolution of whether a VoIP service is a substitute for a PSTN voice service was not necessary for its decision in making the WLR, LCS and PSTN OA exemption orders.³⁰¹ In its decision on the PSTN OA exemption application, the Tribunal did not consider that carrier grade and application layer VoIP services should be included in the retail market for the supply of a bundle of fixed voice services.³⁰²

Geographic dimension

The Tribunal was of the view that an ESA-by-ESA market analysis was permissible for assessing the WLR, LCS and PSTN OA exemption applications.³⁰³

ACCC's current consideration of the relevant markets

For the purpose of assessing whether incorporating the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services will

²⁹⁶ ACCC LCS and WLR Decision, p. 42; ACCC PSTN OA Decision, p. 57.

²⁹⁷ ACCC LCS and WLR Decision, p. 43; ACCC PSTN OA Decision, p. 58.

²⁹⁸ ACCC LCS and WLR Decision, p. 46; ACCC PSTN OA Decision, pp. 61-62.

²⁹⁹ ACCC LCS and WLR Decision, p. 47; ACCC PSTN OA Decision, p. 63.

³⁰⁰ [2009] ACompT 2, [108]; *Application by AAPT Limited* [2009] ACompT 5, [17].

³⁰¹ [2009] ACompT 2, [93]; [2009] ACompT 5, [18].

³⁰² [2009] ACompT 5, [17].

³⁰³ [2009] ACompT 2, [109]; [2009] ACompT 5, [7].

promote competition, the ACCC is of the preliminary view that its 2008 market definition (also adopted by the Tribunal) is appropriate.

Product dimension

The ACCC continues to consider that the relevant product dimension is generally the same as that assessed for the purpose of considering the exemption applications in 2008.

Relevant market dimension	ACCC reasons for maintaining market definition
Retail markets for the supply of a bundled of fixed voice services to consumers (excluding mobile services and VoIP services)	<p>The considers that consumers continue to acquire their fixed voice services as a fixed voice bundle from one provider. The ACCC is of the view that it is appropriate to include basic access, local calls, national and international long distance calls and fixed to mobile calls within the bundle.</p> <p>The ACCC considers that mobile services and carrier-grade and application layer VoIP services should be included in the relevant retail market (see the discussion in relation to VoIP services directly below this table).</p>
Wholesale markets for the supply of fixed voice services to access seekers via re-sale (WLR, LCS, PSTN OA or similar services) and “access based” supply (via the use of a DSLAM or MSAN in conjunction with the ULLS)	<p>The considers that it is appropriate to consider LCS and WLR in terms of a bundled product together with PSTN OA at the wholesale level.</p> <p>The ACCC remains of the view that the ULLS can provide equivalent voice services to that provided by Telstra and resellers of Telstra’s WLR and LCS services. In order to provide equivalent fixed voice services, access seekers must acquire the ULLS from Telstra and install a DSLAM or MSAN into a Telstra exchange.</p> <p>The ACCC’s preliminary view is that LSS is not generally substitutable for the LCS, WLR and PSTN OA services from either the demand or supply side perspectives. While a VoIP service may be offered by LSS-based broadband services, the ACCC considers that any constraint upon fixed line voice services is likely to be only at the margins (see the discussion regarding VoIP below). Further, by definition, if a service provider is using LSS, the end customer must already have a PSTN based voice service. Therefore, any VoIP offering is likely to be an additional voice service rather than an alternative service.</p> <p>The ACCC considers that the ongoing presence of natural monopoly characteristics of fixed line networks means that full-facilities based competition is unlikely to be commercially feasible in most scenarios in metropolitan areas.</p> <p>The ACCC also notes that those competitors with network infrastructure (such as Optus’s HFC network) do not generally offer wholesale access to their network, or offer wholesale fixed voice services to access seekers.</p>

Relevant market dimension	ACCC reasons for maintaining market definition
<p>Retail markets for the supply of bundled broadband and voice services over copper (xDSL), HFC, or possibly, as a weaker substitute, wireless technologies.</p>	<p>The ACCC notes that number of ‘fixed voice only’ SIOs has been declining steadily since September 2007 (when reporting requirements commenced under the Telstra CAN RKR). Many consumers now acquire both data and voice services – often in a bundle from a single service provider.</p> <p>Recent Australian Communications and Media Authority (ACMA) consumer survey data supports that a large proportion of Australian household consumers have opted for bundled communications services in their home (52 per cent). ACMA also found that those services are most commonly plans that bundle fixed-line with internet services (45 per cent).³⁰⁴</p> <p>The ACCC remains of the view that broadband services with similar pricing, quality and functionality to DSL services delivered via HFC (as well as other types of infrastructure) will be substitutable from the perspective of most consumers. Optus currently offers a number of standalone and bundled broadband packages in the retail market over its HFC network.³⁰⁵</p> <p>The number of consumers using wireless technology to access the internet increased the 2009-10 period. The ABS found that at June 2010 there were 3.5 million mobile wireless broadband subscribers in Australia accessing the internet via a dongle or data card connected to a computer, compared to 2.8 million at June 2009.³⁰⁶ During the same period, the number of fixed-broadband subscribers remained fairly steady, suggesting that mobile wireless broadband is growing in importance as a complementary broadband service.³⁰⁷</p>
<p>Wholesale markets for the supply of bundled broadband and voice services to access seekers via re-sale and access based supply (that is, via the use of a DSLAM or MSAN in conjunction with ULLS, LSS or USS)</p>	<p>The ACCC previously analysed the upstream product dimension by starting with the LSS, as access seekers argued that the practices of some access seekers of acquiring LCS/WLR together with LSS (to provide a bundled voice and data service to consumers) could be affected by the granting of exemptions. The ACCC analysed the functionality provided by the LSS compared to potential substitute services. The ACCC is of the preliminary view that this continues to be an appropriate starting point for analysing the wholesale market for the supply of bundled broadband and voice services.</p> <p>Access seekers using the LSS can provide ADSL2+ services to end-users. The ACCC there considers it necessary to assess the boundaries of the relevant upstream market by evaluation the alternative media that can be used by access seekers to provide broadband (either stand-alone or in a bundle with voice services) to end-users.</p> <p>At the “network level”, the ACCC is of the view that the ongoing</p>

³⁰⁴ ACMA, *Communications Report 2009-10 series, Report 2 – Take-up and use of voice services by Australian consumers*, November 2010, p. 26 (available at ACMA website: http://www.acma.gov.au/WEB/STANDARD..PC/pc=PC_312356).

³⁰⁵ See Optus cable plans at: http://personal.optus.com.au/web/ocaportal.portal?nfpb=true&pageLabel=Template_worHS&FP=/personal/bundles/broadbandhomephonem&site=personal (accessed 7 April 2011).

³⁰⁶ ABS, *Internet Activity Australia, June 2010* (available at: <http://www.abs.gov.au/AUSSTATS/abs@nsf/Lookup/8153.0Main+Features1Jun%202010?OpenDocument>, accessed 11 April 2011).

³⁰⁷ ACMA, *Communications Report 2009-10 series, Report 1 – Australia in the digital economy: The shift to the online environment*, November 2010, p. 2 (available at ACMA website: http://www.acma.gov.au/WEB/STANDARD..PC/pc=PC_312356).

Relevant market dimension	ACCC reasons for maintaining market definition
	<p>presence of natural monopoly characteristics across particular elements of the fixed network means that full-facilities based competition is unlikely to be efficient or commercially feasible in most scenarios.</p> <p>At the “access level”, the ACCC continues to consider that the ULLS serves the functional needs of access seekers that seek access to the LSS, as both the ULLS and the LSS can be used for the provision of xDSL services in downstream markets. In the case where an access seeker is using the LSS for the provision of both broadband and voice services, the ULLS will constitute a direct substitute.</p> <p>At the wholesale level, the ACCC considers that wholesale supply of ADSL services (for example, wholesale ADSL2+ offered by Telstra) is a substitute for the LSS (to the extent such services are available at competitive rates).</p>

VoIP

In relation to VoIP, the ACCC notes that VoIP services are being offered by an increasing number of providers as an alternate means of delivering a standard telephone service, and take-up is growing.

In 2009-10, the total number of VoIP services reached 2.9 million, an increase of approximately 500 000 over the previous year.³⁰⁸ ACMA has reported that the most common household use for a VoIP service is to make overseas (64 per cent) and long distance/national calls (53 per cent). However, ACMA noted that a growing number of consumers are using VoIP for national and local calls, and calls to mobiles. ACMA notes that this data suggests that VoIP may be increasingly used as a substitute for fixed-line PSTN services.³⁰⁹

Notwithstanding the increasing number of VoIP services, Telstra continues to supply the vast majority of retail fixed voice services over its CAN.

The ACCC notes that:

- the quality of service of VoIP can vary greatly between VoIP service providers and often VoIP has lower quality of service than PSTN voice³¹⁰
- on the whole VoIP services do not facilitate connection to emergency services numbers
- VoIP services are not generally available during power outages
- VoIP services may require the customer to acquire a VoIP-specific phone at the customer end
- to acquire VoIP services an end user must also acquire a broadband service (unlike traditional PSTN voice)

³⁰⁸ ACMA, *Communications Report 2009-10 series, Report 1 – Australia in the digital economy: The shift to the online environment*, November 2010, p. 33 (available at ACMA website: http://www.acma.gov.au/WEB/STANDARD..PC/pc=PC_312356).

³⁰⁹ ACMA, *Communications Report 2009-10 series, Report 2- Take-up and use of voice services by Australia consumers*, November 2010, p. 14 (available at ACMA website: http://www.acma.gov.au/WEB/STANDARD..PC/pc=PC_312356).

³¹⁰ Note that broadband providers that operate their own network can have some control over the transport of their VoIP traffic and therefore have some control over the quality of their service. See also ACMA, *The Australian VoIP Market—the supply and take-up of VoIP in Australia*, December 2007, p. 19.

- VoIP can provide end users with greater functionality than PSTN voice through the additional features of the service—e.g. ‘simultaneous ring’,³¹¹ ‘sequential ring’,³¹² and ‘music on hold’.

Despite signs that consumers are increasingly acquiring VoIP services, the ACCC is of the preliminary view that the extent to which consumers consider VoIP services substitutable for fixed line voice services remains unclear. The ACCC therefore considers it prudent to adopt a conservative approach, and considers that any constraint of VoIP upon fixed line voice services is likely to be only at the margins.

Mobile voice

Between 2003-04 and 2009-10, call minutes of retail mobile services significantly increased.³¹³ Over the same period, the total minutes of fixed line originating calls declined from 139.1 billion to 45.6 billion minutes. Mobile originating calls exceeded fixed line originating calls in 2007-08 for the first time and the gap has widened significantly since then.

While the ACCC considers that, in some circumstances and for some consumers, mobile voice services may be used in place of fixed voice services, the ACCC notes that substitution occurs more around usage than access – that is, consumers are choosing to subscribe to both fixed and mobile voice services, rather than switching from fixed services to mobile services exclusively.³¹⁴ The ACCC generally views mobile services and fixed services as complementary services.

Geographic dimension

The ACCC is of the preliminary view that an ESA-based market analysis is appropriate for assessing the promotion of competition within the relevant markets. This approach recognises the commercial realities of DSLAM investment and recognises that a key driver for a shift in competitive dynamics across discrete geographic regions on the copper based network is likely to be the take-up (and potential take-up) of ULLS services.

23.1.1.2 State of competition in the relevant markets

Once the relevant market has been defined (to the extent possible) the next step in the analysis is to assess the state of competition in the relevant markets.

³¹¹ This refers to being able to have multiple phones ring simultaneously when calls are received on one phone number. For example, calls to an end user’s desk phone could also ring their mobile phone, in case the end user was not at their desk.

³¹² Being able to telephone up to three locations (in addition to the base location) in the sequence an end user supplies for a specified number of rings.

³¹³ ACCC, RAF RKR (2003-04 to 2009-10).

³¹⁴ See also ACMA, *Communications report 2009-10 series: Report 2 – Take-up and use of voice services by Australian consumers*, November 2010 (available on the ACMA website at: http://www.acma.gov.au/WEB/STANDARD..PC/pc=PC_312356).

Retail market for fixed voice services

In its 2008 market analysis, the ACCC had regard to both the level of competition in the markets and the potential for the development of competition in a market.³¹⁵ The Tribunal strongly endorsed this approach.³¹⁶

Consistent with its 2008 approach to assessing the level of competition in a market, the ACCC will examine:

- market concentration
- the number of ULLS competitors in an ESA
- the number of full-facilities based competitors in an ESA, and
- evidence of retail market outcomes.

In assessing the potential for development of competition in a market, the ACCC will examine:

- the sunk costs involved in DSLAM/MSAN deployment
- the risk of asset stranding, and
- non-price barriers to the provision of fixed voice services via the ULLS.³¹⁷

The Tribunal had regard to similar factors in assessing the level of competition in the relevant markets. The Tribunal also had regard to the amount of spare capacity in access seeker DSLAMs. The ACCC now has information regarding access seekers' DSLAM spare capacity in the Attachment A ESAs which it has collected in accordance with the Tribunal's Metropolitan Orders.

Market concentration

At the time of making the Exemption Determinations, Telstra was the dominant provider of retail fixed voice services at a national level.³¹⁸

Telstra continues to dominate the provision of fixed voice services over its copper CAN. In the period of 2009-10, 78 per cent of all end-users supplied with fixed voice services over the CAN were Telstra's retail customers. However, this is a slight reduction compared with the 2008-09 financial year, where Telstra possessed 80 per cent of this market.³¹⁹

In the 380 Attachment A ESAs, Telstra possessed a lesser 73 per cent of retail fixed voice SIOs as at September 2010.³²⁰ It is difficult to determine an accurate percentage of retail fixed voice SIOs in the 17 CBD ESAs due to the presence of competing networks over which services are provided (that is, networks other than Telstra's CAN).

The Tribunal's calculation of market share takes into account ULLS-based competitors installed spare capacity. The Tribunal reasoned that a ULLS-based competitor who installs spare capacity has made an investment in the expectation that

³¹⁵ ACCC LCS and WLR Decision, p. 68; ACCC PSTN OA Decision, p. 88.

³¹⁶ [2009] ACompT 2, [129].

³¹⁷ ACCC LCS and WLR Decision, pp. 68-86; ACCC PSTN OA Decision, pp. 83-105.

³¹⁸ ACCC LCS and WLR Decision, p. 69; ACCC PSTN OA Decision, p. 84.

³¹⁹ Telstra 2010 Annual Report; Telstra, CAN RKR data, June 2010; Telstra CAN RKR data, June 2009.

³²⁰ Telstra CAN RKR data, September 2010; Telstra WLR SIO data, September 2010.

it will attract new business, and it may be inferred that the competitor intends to remain in the market.³²¹ Taking spare capacity into account when calculating ULLS-based competitor market share is consistent with the Tribunal's and the ACCC's approach that regard should be had to both the level of competition in a market and the potential for the development of competition in a market.

Using the Tribunal's market share calculation, between March 2010 and September 2010, the number of Attachment A ESAs with above a 30 per cent market share has increased. This is displayed in the table below.

ULLS-based competitor market share in 380 Attachment A ESAs										
	<10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%
Mar 10	36	61	142	105	34	1	0	1	0	0
Sep 10	18	59	111	122	64	3	3	0	0	0

Sources: Aggregated spare capacity data provided by ULLS-based competitors for March 2010 and September 2010; Telstra CAN RKR data for March 2010 and September 2010; Telstra WLR SIO data for March 2010 and September 2010.

The Tribunal also considered that the percentage of lines controlled by access seekers using ULLS in the nominated ESA provided an indication of the market share that ULLS-based providers have captured from Telstra.³²² At the time of making the Tribunal's Metropolitan Orders, ULLS SIOs made up on average nine per cent of total SIOs in Telstra's proposed metropolitan exemption ESAs (387 ESAs).³²³ As at December 2010 this percentage has increased to approximately 16 per cent for the 380 Attachment A ESAs.³²⁴

There is a trend of increasing ULLS SIOs within the Attachment A ESAs. This is illustrated by the following graph, which displays the growth in ULLS SIOs since September 2008.

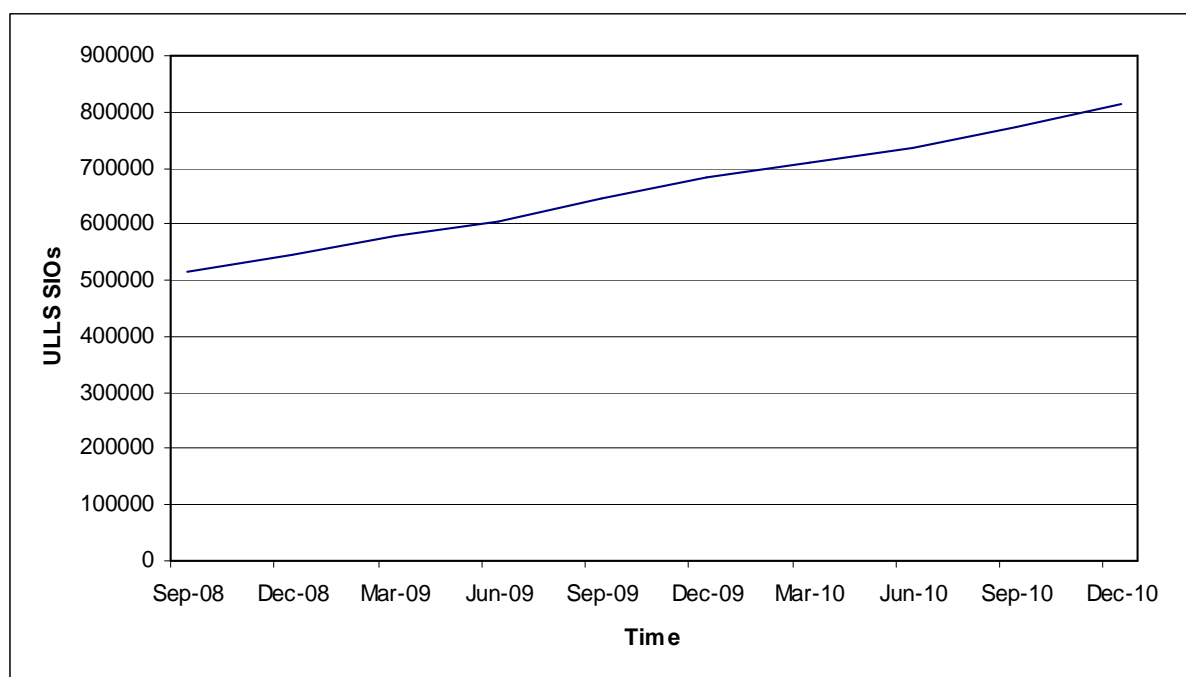
³²¹ *Application by Chime Communications Pty Ltd (No 3)* [2009] ACompT 4, [15].

³²² [2009] ACompT 2, [137].

³²³ See ACCC PSTN OA Decision, p. 85.

³²⁴ Telstra CAN RKR data, December 2010.

Figure 23.1: ULLS SIO growth in the Attachment A ESAs



Source: Telstra CAN RKR data, September 2008 to December 2010.

The increase in ULLS SIOs is a likely result of access seekers migrating their customers from other services (e.g., WLR) to ULLS services, leveraging off the investment they have already made in alternative network infrastructure.

The Tribunal also had regard to the ratio of ULLS SIOs to WLR SIOs in the 380 Attachment A ESAs. In March 2008, the ratio of ULLS SIOs to WLR SIOs was 46.0 per cent in the Attachment A ESAs.³²⁵ In September 2010, the ratio increased to 56.0 per cent.³²⁶ Access seekers now acquire more ULLS SIOs than WLR SIOs in the Attachment A ESAs.

Number of ULLS-based competitors in an ESA

The number of ULLS-based competitors in the 380 Attachment A ESAs has increased since the ACCC and the Tribunal made their respective exemption orders. Between September 2008 and December 2010, there has been an approximately 20 per cent increase in the number of DSLAM competitors. The table below displays the trend of increasing DSLAM competitors in the 380 Attachment A ESAs since September 2008.

³²⁵ [2009] ACompT 2, [138].

³²⁶ Telstra, CAN RKR data, September 2010; Telstra, WLR SIO data, September 2010.

Table 23.1: Number of ULLS-based competitors in Attachment A ESAs

Date	Number of ULLS competitors
Sep 08	1350
Dec 08	1393
Mar 09	1475
Jun 09	1514
Sep 09	1530
Dec 09	1526
Mar 10	1540
Jun 10	1576
Sep 10	1613
Dec 10	1633

Source: Telstra CAN RKR data, September 2008 to December 2010.

The table below shows that the number of Attachment A ESAs with one, two or three ULLS-based competitors has been decreasing between September 2008 and December 2010; while the number of ESAs with more than five competitors has been increasing in that time.

Table 23.2: The number of ULLS based competitors in the Attachment A ESAs

Date	Number of ULLS-based competitors							
	1	2	3	4	5	6	7	8+
Sep 08	60	72	70	66	50	25	24	13
Dec 08	58	67	61	75	53	25	25	16
Mar 09	52	56	56	77	61	34	26	18
Jun 09	46	54	51	85	60	39	27	18
Sep 09	45	52	53	82	61	40	27	20
Dec 09	47	53	49	84	60	40	26	21
Mar 10	46	52	49	81	64	39	28	21
Jun 10	43	46	51	76	70	44	30	20
Sep 10	40	44	50	70	73	51	32	20
Dec 10	40	41	50	70	69	55	34	21

Source: Telstra CAN RKR data, September 2008 to December 2010.

As at December 2010, the exempt CBD ESAs had on average 9.1 ULLS-based competitors per exchange; with no less than seven ULLS-based competitors in any one exchange.³²⁷

Full-facilities based competitors

Optus' HFC network is available in parts of the 380 Attachment A ESAs. The ACCC considers that at the retail level, fixed voice services provided over a HFC network are

³²⁷ Telstra CAN RKR data, December 2010.

likely to be substitutable to voice services provided over Telstra's CAN. However, the ACCC understands that the differing technology of the HFC network can incur switching costs for consumers in switching their customer premises.³²⁸

In 2008, the ACCC was satisfied that there was significant alternative infrastructure in the CBD ESAs.³²⁹ The Tribunal noted (at the time it made its exemption orders) there were six competing fibre networks within those ESAs.³³⁰

Evidence of retail market outcomes

Evidence of positive retail market outcomes would include targeted marketing campaigns in areas where there is effective competition.

However, Telstra and other service providers generally adopt national retail pricing. The benefits of a national pricing strategy may include seeking to achieve cost savings in advertising, decreased potential for confusion for customers or creating ease in training sales staff.³³¹ Therefore, it is difficult to analyse retail price outcomes in specific geographical areas such as the 380 Attachment A ESAs.

Sunk costs of DSLAM/MSAN deployment

There are various costs associated with entry into retail fixed voice via ULLS-based competition. The costs involved with entry via ULLS may include the deployment of DSLAMs or MSANs, co-location, backhaul transmission and various IT and retailing costs.

The most recent information before the ACCC (obtained by the ACCC for the purpose of the 2008 exemption applications), suggests that the fixed costs of the DSLAM/MSAN infrastructure are in the order of \$12,000-\$14,000 per DSLAM. This includes the DSLAM/MSAN sub-rack and racks, the DSLAM itself, alarm and power distribution units, power cabling to the racks, and signal and cabling to the racks.³³²

The ACCC is of the view that the historical and continuing deployment of competitor DSLAMs in ESAs supports the view that such costs are not likely to be a material barrier to entry.³³³ The Tribunal also concluded that the cost of DSLAM equipment was not a prohibitive barrier to competitively significant entry.³³⁴

The ACCC has previously accepted that an efficient access seeker is likely to make a return on a DSLAM investment within two years of deployment, and considers that this is likely to remain the case.³³⁵ The ACCC recognises that the potential asset life of a DSLAM (or MSAN) is likely to be greater than two years, and the majority of the Attachment A ESAs already have over four ULLS-based competitors (excluding Telstra). This means that efficient access seekers are likely to have already begun extracting value from ULLS-based investments.

Spare DSLAM capacity

The Tribunal's Metropolitan Orders encouraged access seekers to submit DSLAM spare capacity data to the ACCC on a six-monthly basis. Under the Tribunal's orders,

³²⁸ ACCC LCS and WLR Decision, p. 71; ACCC PSTN OA Decision, p. 86.

³²⁹ ACCC PSTN OA Decision, p. 7.

³³⁰ [2009] ACompT 5, [61].

³³¹ ACCC LCS and WLR Decision, p. 71; ACCC PSTN OA Decision, p. 87.

³³² ACCC LCS and WLR Decision, p. 73; ACCC PSTN OA Decision, p. 90.

³³³ ACCC LCS and WLR Decision, p. 73; ACCC PSTN OA Decision, p. 90.

³³⁴ [2009] ACompT 2, [144].

³³⁵ ACCC LCS and WLR Decision, p. 74; ACCC PSTN OA Decision, p. 91.

an ESA only becomes exempt if the ULLS spare capacity in that ESA is equal to or greater than 40 per cent of the aggregate number of the ULLS competitors' WLR SIOs in that ESA.

The Tribunal considered that this condition (combined with the market share condition³³⁶) ensured that prior to the exemption taking effect in an ESA, ULLS-based competitors would have the installed enough spare capacity to transfer a not-insignificant number of their end-users from the WLR service to ULLS-based services, and an incentive to install the necessary infrastructure to transfer their remaining end-users.³³⁷

The Tribunal originally considered taking into account potential installed capacity (i.e. the total number of ports that ULLS-based competitors' DSLAMs are capable of supporting, even though the cards for those ports have not yet been installed). In the end, the Tribunal did not adopt this standard for two reasons:

- too many areas of uncertainty and difficulty are involved in assessing potential installed capacity, and
- over time, as additional cards are installed, potential installed capacity will be reflected in the calculation of installed capacity.³³⁸

As a result, the spare capacity report by access seekers in accordance with the Tribunal's Metropolitan Orders is likely to underestimate the total spare capacity of their installed DSLAMs.

Notwithstanding, as at September 2010 access seeker installed spare capacity was greater than or equal to 40 per cent of their aggregate WLR SIOs in 96.6 per cent of the Attachment A ESAs. In 78 per cent of the Attachment A ESAs, access seeker installed spare capacity is greater than access seeker WLR SIOs. This suggests that access seekers consider it possible to obtain additional market share from Telstra or other competitors (that is, not just transfer their existing WLR customers to a ULLS-based service).

Between March 2010 and September 2010, access seeker DSLAM spare capacity increased by 22.8 per cent in the attachment A ESAs. Given that this increase coincides with an increase in ULLS SIOs in the Attachment A ESAs (which would otherwise reduce the spare capacity of a DSLAM), it implies that access seekers have continued to invest in additional spare capacity.

Risk of asset stranding

In 2008 some access seekers submitted that a widespread fibre deployment had the potential to render much DSLAM/MSAN equipment obsolete and that the uncertainty relating to a fibre upgrade could affect incentives for efficient investment in infrastructure.³³⁹

³³⁶ For an ESA to become exempt, the Aggregate Market Share (defined term) within that ESA must be equal to or greater than 30 per cent.

³³⁷ [2009] ACompT 4 at [22].

³³⁸ [2009] ACompT 4 at [15].

³³⁹ ACCC LCS and WLR Decision, p. 75; ACCC PSTN OA Decision, p. 93.

On 11 April 2008 The Federal Government released a request for proposals (RFP) to roll-out and operate a fibre to the node NBN, with the roll-out occurring over a five year period.³⁴⁰

When it made its 2008 exemption decisions, the ACCC considered that the impending NBN build may have created uncertainty in relation to future investment in DSLAM/MSANs. However the ACCC noted that the prospect of a fibre-based network roll-out was not itself new – for example, Telstra first announced an intention to roll-out FTTN in late 2005.

In 2008, access seekers submitted that they were in the process of ceasing further investment in ULLS-based infrastructure due to stranding concerns. At the time the access seekers made their submissions, there was still a continuing trend of ULLS-based infrastructure investment.³⁴¹

However, since June 2008, there has been continuing access seeker investment in DSLAM/MSAN equipment in the 380 Attachment A ESAs (see table 23.1 above), resulting in a deepening of the existing DSLAM footprint in services areas that are more conducive to ULLS-based entry. Further, continuing investment in installed DSLAM spare capacity was also observed. In the two years between December 2008 and December 2010, there has been a 17 per cent increase in the number of DSLAMs installed in the Attachment A ESAs.³⁴²

The ACCC observes that these previous announcements regarding an NBN build do not appear to have discouraged investment in DSLAM/MSAN infrastructure. Most of the take up in ULLS and LSS has occurred since that time.

In March 2010 Internode announced it had installed new ADSL2+ equipment at seven exchanges in Tasmania. It had previously offered customers with ADSL2+ services using Telstra wholesale equipment. Internode noted that its new infrastructure would enable it to transfer 3000 customers from slower wholesale broadband systems into its dedicated high-speed broadband services over two months.

Internode has stated that the customer migration made good business sense as “Internode’s own ADSL2+ equipment gives our customers better performance and it costs us less to provide these services.”³⁴³

More recently in March 2011, Westnet announced in that it had invested in new DSLAM infrastructure in Geraldton (SA) as a result of a new fibre link built between Perth and Geraldton.³⁴⁴ Westnet noted that they had “installed extra spare capacity to allow new customers to join up and enjoy the choice of both new plans and ...customer service ...”³⁴⁵

These instances of DSLAM investment support the ACCC’s view that, despite uncertainty surrounding the NBN, access seekers will continue to invest in DSLAM/MSAN equipment where they consider it efficient to do so.

³⁴⁰ DBCDE, Request for Proposals to roll-out and operate a national broadband network for Australia, 11 April 2008.

³⁴¹ ACCC LCS and WLR Decision, p. 76; ACCC PSTN OA Decision, p. 94.

³⁴² Telstra CAN RKR data, December 2008 and December 2010.

³⁴³ Internode media release, *Extreme ADSL2+ presence boosted in Tasmania*, 25 March 2010 (<http://www.internode.on.net/news/2010/03/171.php>, accessed 9 April 2011).

³⁴⁴ Westnet Media Release, *A new Westnet broadband network for Geraldton. There’s nothing faster*, 11 March 2011 (found at <http://www.westnet.com.au/press/>, accessed 9 April 2011).

³⁴⁵ *ibid.*

It may be argued that, since the ACCC and the Tribunal made their respective exemption orders,³⁴⁶ there is more certainty regarding the Federal Government's intention to build a nationwide fibre network. In April 2009 the Federal Government announced its intention to create NBN Co to build a superfast NBN. Of recent significance is the passage of the CACS Act in December 2010, and the non-binding Financial Heads of Agreement (FHoA) reached between Telstra and NBN Co in June 2010. These developments further crystallise the Federal Governments' policy to build a FTTP network to 93 per cent of the Australian population.

However, the ACCC remains of the view that any additional investment required as a result of including the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services is likely to be limited to a relatively small number of ESAs and by a limited number of access seekers.³⁴⁷ In the currently exempt ESAs (including the 52 ESAs to be exempt as at June 2011) there is on average 5.4 ULLS-based competitors (excluding Telstra).³⁴⁸ In the majority of the 380 Attachment A ESAs there are already four or more ULLS-based competitors excluding Telstra (indeed, almost 30 per cent of the ESAs have six or more competitors excluding Telstra). There is an average of nine ULLS based competitors in the CBD ESAs. Some, if not all, of the ULLS-based competitors in each ESA will already be supplying a fixed voice service.

Therefore, in the majority of the affected ESAs, competitively priced alternative WLR/LCS-type services are likely to be available in the event of a price rise by Telstra (the ULLS continues to be a regulated service in those ESAs).

Also, the Tribunal's Metropolitan Orders ensure that the ULLS-based competitors in the affected ESAs have sufficient spare capacity to absorb 40 per cent of their WLR SIOs in those ESAs.

In 58 per cent of the currently calculated exempt ESAs, there is already enough spare DSLAM capacity installed to absorb access seekers' total WLR SIOs in that ESA.

The ACCC also remains of the view that the relatively small amount of additional investment that may be made by access seekers due to the effect of the exemptions would be efficient.³⁴⁹ This is because, where necessary, the move to ULLS-based provision of fixed voice services prior to a fibre upgrade will allow access seekers to build their reputation and customer base through the ability to provide differentiated products. The ACCC considers that this will allow access seekers to better transition to an alternative service and make it more viable to compete in downstream markets when fibre is deployed.

There is evidence that industry participants are bolstering their customer reputation in preparation for the NBN roll-out. In relation to Internode's March 2010 DLSAM investments in Tasmania, an Internode representative stated in an interview with Computer World Australia:

We intend to keep deploying more ADSL2+ DSLAMs around Australia in parallel to being an active participant in the ongoing development of the NBN. ... We don't see these as conflicting things. Our customers need the best service we can build for them today, as well as

³⁴⁶ Having regard to information current as at August 2008 (WLR and LCS) and October 2008 (PSTN OA).

³⁴⁷ ACCC LCS and WLR Decision, p. 77; PSTN OA Decision, p. 94.

³⁴⁸ Telstra CAN RKR, December 2010.

³⁴⁹ ACCC LCS and WLR Decision, p. 77.

being able to access the best service tomorrow (via the NBN) as and when that becomes an option for various geographic regions around Australia over time.³⁵⁰

The ACCC considers that the extent to which DSLAM/MSAN assets could be stranded by the NBN depends, in a large part, upon details of the implementation of the NBN by NBN Co, such as notice periods for cutover from copper to fibre. Based on the most recent information before it, the ACCC considers that the average pay-back period on previous DSLAM investments (i.e., typically within the 380 Attachment A ESAs) for an efficient competitor is approximately two years. The construction of the NBN is likely to be completed by 2020.³⁵¹ If the fibre roll-out will not affect an ESA until the later stages of the NBN roll-out, the NBN will not be likely to impact significantly upon the ability of an efficient access seeker to recoup DSLAM investments in the 380 Attachment A ESAs.

In 2008, the ACCC stated that:

...that uncertainty associated with the NBN process does not significantly alter the ACCC's assessment of whether granting exemptions is in the LTIE. Overall, the ACCC's view is that ULLS-based competition is a preferable form of competition to re-sale based competition in the long-term, and that making the exemptions, subject to the various conditions limitations... will be in the LTIE, regardless of whether, or when, the NBN process is implemented.³⁵²

Despite the more recent developments regarding the build of a NBN, for the reasons outlined above, the ACCC is of the preliminary view construction of the NBN does not affect its reasons for proposing to include the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services. The ACCC seeks industry views on the issue of asset stranding in light of the recent developments surrounding the NBN.

Non-price barriers to the provision of fixed voice via ULLS

Consistent with its 2008 exemption decisions, the ACCC has considered the following non-price barriers to the provision of fixed voice via the ULLS:

- exchange capping
- delays and queuing in installing equipment
- LSS to ULLS migration
- availability of transmission services
- pair gains
- availability of switching capability, and
- customer information and inertia.³⁵³

³⁵⁰ Computerworld, *Internode continues ADSL2+ roll-out despite NBN commitment*, 25 March 2010 (http://www.computerworld.com.au/article/340925/internode_continues_adsl2_roll-out_despite_nbn_commitment/, accessed 9 April 2011).

³⁵¹ Mike Quigley presentation to Commsday Summit, 29 March 2011 (found on NBN Co website: <http://www.nbnco.com.au/wps/wcm/connect/main/site-base/main-areas/publications-and-announcements/announcements/Presentation-to-Commsday-Summit.html>, accessed 9 April 2011).

³⁵² ACCC LCS and WLR Decision, p. 79.

³⁵³ ACCC LCS and WLR Decision, pp. 79-86; ACCC PSTN OA Decision, p. 97.

Exchange capping, queuing and LSS to ULLS migration

The ACCC will not consider in great detail the non-price barriers to entry posed by exchange capping, queuing and LSS to ULLS migration for the purposes of this discussion paper. This is because the Tribunal's Metropolitan Orders impose limitations such that the exemptions do not have effect:

- within an ESA from the date on which an exchange building within an ESA first becomes a capped exchange, a potentially capped exchange, or a constructively capped exchange³⁵⁴
- with respect to the supply by Telstra of the WLR, LCS or PSTN OA services to a queued access seeker in an exemption ESA,³⁵⁵ and
- in relation to, and only to, the supply by Telstra of the WLR, LCS or PSTN OA services in respect of an end-user who, immediately prior to the practical commencement date of the orders, was supplied with a bundled fixed voice and broadband service by the access seeker using the LSS, the WLR service and the LCS supplied by Telstra until the date that a Prescribed LSS to ULLS Migration Process is established.³⁵⁶ The Tribunal's Metropolitan Orders set out minimum characteristics that the LSS to ULLS migration process must satisfy.

Therefore, to the extent that exchange capping, queuing, or LSS to ULLS migration represent non-price barriers to the provision of fixed voice services via the ULLS, they will be mitigated by the limitations set out in the Tribunal's orders.

Transmission

The ACCC does not consider the availability of transmission services to be a barrier to the provision of fixed voice services via the ULLS. The DTCS is currently a declared service. The ACCC has only granted exemptions in relation to the DTCS in relation to routes and locations where there is substantial infrastructure competition, and where the ACCC considered it to be in the LTIE to grant exemptions.

The ACCC also notes that DSLAM-based competitors have been able to enter the 380 Attachment A ESAs and provide fixed voice services to their customers, which suggests that the availability of transmission services is not a prohibitive barrier to entry.

Pair gain systems

The presence of a pair gain system along any point of the copper/aluminium wire between the DSLAM and a customer will prevent the access seekers supplying ULLS-based services to that customer.

In 2008, the ACCC determined that approximately seven per cent of SIOs within the ACCC's exemption footprint were unavailable for ULLS use by access seekers due to pair gain deployment.³⁵⁷ The ACCC dealt with the issue of lines affected by pair gain technology by excluding those lines from the calculation of the total number of 'addressable SIOs' within an ESA. The ACCC considered that it was in the LTIE to

³⁵⁴ Clause 6.5 of the Tribunal's Metropolitan Orders.

³⁵⁵ Clause 6.4 of the Tribunal's Metropolitan Orders.

³⁵⁶ Clause 6.8 of the Tribunal's Metropolitan Orders. The exemption in relation to such an ESA will then only have effect if Telstra's complies with the prescribed LSS to ULLS Migration Process (clause 6.9 of the Tribunal's Metropolitan Orders).

³⁵⁷ ACCC LCS and WLR Decision, p. 72.

exempt an ESA if it had (a) 3 or more ULLS-based competitors (excluding Telstra); or (b) 14,000 addressable SIOs (i.e., SIOs not affected by pair gains).

On review, the Tribunal initially considered that a limitation could be inserted in the exemption orders to limit the exemption from applying to those lines affected by the presence of a pair gain system. However, Telstra submitted to the Tribunal that the imposition of such a condition would be complex, costly and impracticable, and that any benefits derived from the condition would be outweighed by those costs and difficulties. The Tribunal ultimately accepted that the imposition of such a condition would be disproportionately expensive.³⁵⁸

The ACCC considers that the conditions in the Tribunal's Metropolitan Orders are sufficient to ensure that the competitors are likely to remain in the market as viable entities and continue to invest in ULLS infrastructure, and constrain Telstra's pricing. The ACCC had considered in its 2008 exemption orders that the presence of three ULLS based competitors was sufficient to ensure sufficient competition in the long-run (notwithstanding the presence of a percentage of lines affected by pair gains within those ESAs). The ACCC does not consider that the presence of pair-gain systems in the ESAs will significantly impact competitor presence in the ESAs which become exempt ESAs.

Availability of switching capability

The ACCC is of the view that if access seekers do not own their own PSTN switches, and cannot obtain a competitively priced WLR/LCS-type services, may be required to make some additional investment to migrate to MSAN-based supply of a voice service.³⁵⁹

Customer information and inertia

The ACCC maintains its view that while customer inertia makes it more difficult for competitors in the supply of fixed voice services to gain scale, the ACCC is of the view that customer information and inertia is not an insurmountable barrier to ULLS-based entry.³⁶⁰

Conclusion – state of competition in retail voice markets

The ACCC notes that the state of competition differs in each of the 380 Attachment A ESAs. However, the ACCC considers that since 2008 access seekers have continued to win a modest amount of fixed line market share from Telstra, and have continued to increase the number of customers provided with services over the ULLS in the 380 Attachment A ESAs. There has also been a fairly significant increase in the amount of new competitor DSLAMs installed in the 380 Attachment A ESAs (at least a 20 per cent increase since September 2008).

The ACCC notes that the barriers which it considers to be significant to the provision of ULLS based services have been addressed by the limitations contained in the Tribunal's Metropolitan Orders. The ACCC does not consider that there are any other significant barriers competitors providing services to customers via the ULLS.

The ACCC considers that the CBD ESAs are characterised by strong facilities based competition, and also substantial DSLAM-based competition.

³⁵⁸ [2009] ACompT 4, [23]-[24].

³⁵⁹ See ACCC LCS and WLR Decision, p. 84; ACCC PSTN OA Decision, pp. 103-104.

³⁶⁰ See ACCC LCS and WLR Decision, p. 85; ACCC PSTN OA Decision, pp. 104-105.

Wholesale market for the supply of fixed voice services

The ACCC is of the preliminary view that the wholesale markets for the provision of a bundle of fixed voice services does not display characteristics of a competitive market. Telstra still controls the infrastructure by which the majority of voice services are provided.

Retail market for the supply of bundled broadband and fixed voice services

The ACCC is of the preliminary view that the retail bundled broadband and voice market is characterised by ever-increasing levels of competition. Since 2008, access seekers have continued to take-up LSS and ULLS SIOs.

Strong competition at the retail level is evidence in ESAs where effective DSLAM-based competition exists. This can be evidence by retail ISPs offering substantially greater value in terms of price per gigabyte data quota when providing services “on-net” rather than “off-net”.

In contrast, retail competition is significantly weaker in ESAs where Telstra is the dominant provider of DLSAM infrastructure. In these ESAs, Telstra’s competitors largely rely on Telstra’s wholesale ADSL to provide their customer with fixed broadband services.

Prices for DSL services fell in 2009-10 by 2.0 per cent following a 0.4 per cent drop in 2008-09. This suggests increase price competition in the DSL sector is occurring.

Since 2008, there has also been continuing consumer take-up of wireless (both mobile and fixed) technologies for broadband internet access.

Wholesale market for the supply of bundled broadband and fixed voice services

Competition in the fixed broadband market has in recent years continues to be driven by access to Telstra’s CAN by means of take-up of ULLS and LSS.

23.1.2 Promotion of competition

Outlined below are the ACCC’s preliminary views as to whether incorporating the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services will promote competition in the relevant markets.

Both the ACCC and the Tribunal have previously considered that exempting access providers from the SAOs in relation to the supply of the WLR, LCS and PSTN OA services in certain ESAs, subject to conditions and limitations, would promote competition in the relevant markets.

A key issue in the ACCC’s 2008 assessment was the extent to which access seekers could compete in the downstream markets for fixed voice services via use of the ULLS in the absence of regulated access to the WLR, LCS and PSTN OA services. The ACCC considered that increased ULLS-based provision of voice services would be in the LTIE as it would enable competitors to compete in the downstream markets on greater dimensions of supply and facilitate the development of innovative services to meet changing customer demands over time. The ACCC considered this would lead to more sustainable competition compared with pure resale models in the longer-term.³⁶¹

³⁶¹ ACCC LCS and WLR Decision, p. 121; ACCC PSTN OA Decision, p. 145.

While the Tribunal was not as concerned with whether the ULLS provided a superior quality of services to the WLR, LCS and PSTN OA based voice services, the Tribunal considered that the LTIE could be promoted by deregulating the WLR, LCS and PSTN OA services, and promoting take up of the ULLS. The Tribunal considered that competition was likely to be promoted:

where deregulation takes place in a market where the Tribunal is satisfied that an entrant or small current player has taken, or has the physical capacity and willingness to take, market share from the large or dominant incumbent, by offering end-users a better price-product-service package.³⁶²

Voice

The ACCC's preliminary view is that incorporating the effect of the Exemption Determinations into the FADS will promote competition principally in the downstream market for fixed voice services. The ACCC remains of the view that ULLS-based competition leads to greater price competition as entrants have more control over costs, and enables greater service innovation as the competitive entrants are not tied to the functionality of the incumbent's network.

By effectively deregulating the WLR, LCS and PSTN OA services within the ESAs, the Exemption Determinations encourage access seekers to utilise existing DSLAM infrastructure to provide ULLS-based voice services, and invest in new DSALM infrastructure where it is efficient to do so.

The ACCC is of the preliminary view that the three conditions included in the Tribunal's Metropolitan Orders helps to ensure that only those ESAs in which the ULLS is likely to provide competitive restraint on Telstra will become exempt.

The ACCC agrees with the Tribunal that three ULLS-based competitors (excluding Telstra) in an ESA prior to deregulation ensures that there is a sufficient number of access seekers who can supply services through the ULLS to provide competitive restraint on Telstra.³⁶³ The ACCC's original exemption orders allowed ESAs to become exempt when they had three or more ULLS-based competitors (excluding Telstra).

The Tribunal's orders also ensure that the ULLS-based competitive entry is significant. The Tribunal's second condition (that the ULLS-based competitors in an ESA must have at least 30 per cent of total SIOs in that ESA) ensures that competitors have developed a sufficient reputation, and post-exemption, are likely to remain in the market as viable entities and continue to supply ULLS-based services.

The Tribunal also imposed a condition that an ESA will only be exempt if the ULLS-based competitors' aggregate installed spare capacity in each ESA is equal to or greater than 40 per cent of their WLR SIOs.

The Tribunal noted that the second and third condition work together to ensure that prior to the exemption taking effect in an ESA, ULLS-based competitors will have the installed spare capacity to transfer a not-insignificant number of their end-users from the WLR service to ULLS-based services, and an incentive to install the necessary infrastructure to transfer the remainder of their end-users.³⁶⁴

³⁶² [2009] ACompT 2, [159].

³⁶³ [2009] ACompT 2, [157].

³⁶⁴ [2009] ACompT 4, [22].

The ACCC notes that the second and third conditions imposed by the Tribunal go beyond the ACCC's 2008 orders – that is, the ACCC was satisfied that if an ESA had three or more ULLS-based competitors, competition would be promoted if the ESA become exempt. However, the ACCC considers that the additional conditions provide a further safeguard so that only those ESAs in which there are conditions for the promotion of ULLS-based service expansion, and further competitive entry will become exempt ESAs.

The ACCC also considers that access seekers will be able to acquire a fixed voice bundle from Telstra or another supplier at a commercially negotiated price in exempt ESAs. The ACCC also notes that the telecommunications-specific anti-competitive who supply a voice and broadband bundle to their customers by conduct provisions of Part XIB of the CCA will continue to apply to the conduct of telecommunications carriers.

The ACCC considers that competition will only be promoted in exempt ESAs if the ULLS remains a viable substitute to resale WLR, LCS and PSTN OA services. In this regard, the ACCC considers that the limitations imposed by the Tribunal in relation to exchange capping, queuing, and LSS to ULLS migration are sufficient to ensure that those access seekers for whom ULLS is not a viable substitute will have recourse to regulated WLR, LCS and PSNT OA services.

Bundled fixed and broadband

The ACCC considers that where the exemptions promote competition in voice markets, this will have a flow-on competition effect in the broadband markets. This is because migration from WLR/LCS/PSTN OA to ULLS allows access seekers to supply a bundled voice and broadband service via their DSLAM/MSAN infrastructure.

However, the ACCC is aware that the exemption may impact those access seekers acquiring the regulated LSS together with wholesale fixed voice services from Telstra.

As noted above, such access seekers will continue to be able to acquire commercially negotiated WLR, LCS and PSTN OA services from Telstra. However, the access seekers who acquire the LSS in conjunction with LCS, WLR and PSTN OA may consider it commercially beneficial to migrate those services to ULLS-based services. The ACCC and the Tribunal considered that there was scope for the competitive process to be harmed if the LSS to ULLS migration involved significant disruption for consumers.

In order to safeguard competition, both the ACCC and the Tribunal considered it necessary to exclude those WLR, LCS and PSTN OA services that are bundled with the LSS service from the effect of the exemption until Telstra developed a suitable LSS to ULLS migration plan.

Both the ACCC and the Tribunal considered that the LSS to ULLS migration process had the following minimum characteristics:

- any period which an end-user is unable to receive a broadband service is less than three hours (or such other period agreed by the Commission),³⁶⁵ and

³⁶⁵ The ACCC has subsequently considered that a four hour outage period was reasonable in the context of LSS and ULLS access dispute.

- end-user involvement in the process is not required.

The ACCC is of the preliminary view that these limitations contained in the Tribunal's Metropolitan Orders are sufficient to ensure competition is promoted in the market for bundled fixed and broadband services. The ACCC notes that it is seeking submissions on whether to amend the Tribunal's Metropolitan Orders to adopt a four hour outage period, to make it consistent with the proposed non-price terms in the FADs (see chapter 21 of the discussion paper)

23.1.3 Any-to-any connectivity

The ACCC considers that incorporating the effect of the Exemption Determinations in the FADs for the WLR, LCS and PSTN OA services will have little impact on the objective of encouraging any-to-any connectivity.

23.1.4 Efficient use of and investment in infrastructure

In assessing whether to include the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services, the ACCC is required to assess whether doing so would encourage the economically efficient:

- use of existing infrastructure, and
- investment in infrastructure.

In its 2008 exemption decision, the ACCC noted the strong relationship between the assessment of promotion of competition and the assessment of encouraging the efficient use of, and economically efficient investment in infrastructure.³⁶⁶ The Tribunal was of the opinion that if competition is promoted then, in a case such as this, efficient investment is encouraged.³⁶⁷ The ACCC is of the preliminary view that this is still the case for the purpose of its current considerations.

Efficient use of existing infrastructure

In 2008, the ACCC was of the view that granting exemptions in the areas identified in its orders would encourage ULLS-based access seekers to make greater use of their existing DSLAM/MSAN investments. In this regard, the ACCC was of the view that granting exemptions would encourage efficient use of existing infrastructure.

The ACCC is of the preliminary view that incorporating the Exemption Determinations into the FADs will continue to encourage the efficient use of access seeker's existing infrastructure.

It is relevant to note here that to become exempt, access seekers in an ESA must have the combined spare DSLAM capacity to capture 40 per cent of their combined WLR SIOs. The ACCC also notes that this spare capacity only represents spare capacity on *currently* installed DLSAM cards, and it is likely access seekers will have a greater amount of total DSLAM spare capacity (i.e., access seekers have the ability to install additional cards on their already installed DSLAM, at a low multiple of the cost of installing a new DSLAM). The ACCC is of the preliminary view that, by encouraging ULLS-based competition, access seekers will be encouraged to make use of existing DSLAM investments (and perhaps install additional cards in their existing DSLAMs).

³⁶⁶ ACCC LCS and WLR Decision, p. 113; ACCC PSTN OA Decision, p. 135.

³⁶⁷ [2009] ACompT 2, [165]; [2009] ACompT 5, [60], [72].

In relation to the PSTN OA CBD exemptions, the ACCC considers that maintaining the CBD exemption would also encourage the economically efficient use of the alternative network infrastructure available in the CBD ESAs.

Efficient investment in infrastructure

The ACCC is of the preliminary view that access seekers will continue to invest in DSLAM/MSAN infrastructure in order to provide services via the ULLS, only where it is efficient for them to do so.

In assessing the objective of whether granting exemptions is likely to promote efficient investment in infrastructure, regard must be had to the incentives for investment in infrastructure.³⁶⁸

The ACCC considers that removing access to regulated WLR, LCS and PSTN OA services in the exempt ESAs provides an incentive for access seekers to invest in DSLAM/MSAN infrastructure in order to provide fixed voice services via the ULLS (which continues to be a regulated service in those ESAs). As outlined in section 23.1.3 above, the ACCC is of the preliminary view that incorporating the effect of the Exemption Determinations in the FADs will encourage the promotion of competition in the exempt ESAs, which flow on effects for the efficiency of investment in new infrastructure.

The ACCC is also required to have regard to the risks involved in making the investment in infrastructure.³⁶⁹ As outlined in section 23.1.1.2 above, the ACCC considers that the uncertainty surrounding the roll-out of the NBN may act as a disincentive for investment in new infrastructure due to the risk of stranding. However, for the reasons outlined in that section, the ACCC considers that access seekers will continue to invest in DSLAM/MSAN infrastructure where it is efficient for them to do so.

The ACCC is also of the preliminary view that if it were to effectively ‘reverse’ the Exemption Determinations at this stage (by not including them in the FADs for the WLR, LCS and PSTN OA services), it would create uncertainty and instability, especially for competitors who have invested in DSLAM/MSAN equipment in preparation for the exemptions taking effect. The ACCC considers this may create an environment which would deter future efficient investment in infrastructure.

23.2 Paragraph 152BCA(1)(b) – Legitimate business interests of a carrier or carriage service provider

This criterion requires the ACCC to have regard to the legitimate business interests of the carrier or provider of the declared services when deciding whether to incorporate the effect of the Exemption Determinations into the relevant FADs.

The ACCC is of the preliminary view that incorporating the effect of the Exemption Determinations into the FADs will not be detrimental to the business interests of the carrier or provider of WLR, LCS and PSTN OA services (in most cases Telstra).

The ACCC notes that in non-exempt ESAs, the carrier or provider will be able to charge either commercially negotiated prices for the declared services, or have recourse to the FAD prices for the declared WLR, LCS and PSTN OA services. The

³⁶⁸ Paragraph 152AB(6)(c) of the CCA.

³⁶⁹ Subsection 152AB(7A) of the CCA.

proposed FAD prices for the WLR, LCS and PSTN OA reflect the underlying costs of providing those services.

In the exempt ESAs, the carrier or provider of the WLR, LCS and PSTN OA services will be able to commercially negotiate a price for access to the declared service with access seekers.

23.3 Paragraph 152BCA(1)(c) – Interests of all persons who have rights to use the declared service

This criterion requires the ACCC to consider the interests of all persons who have the right to use the declared services when deciding whether to incorporate the effect of the Exemption Determinations into the relevant FADs.

The ACCC interprets this criterion as requiring it to have regard to the interests of access seekers.

If an ESA is exempt, access seeker will continue to be able to commercially negotiate terms of access to the relevant exempt services with Telstra. The ACCC also notes that the telecommunications-specific anti-competitive conduct provisions of Part XIB of the CCA will continue to apply to the conduct of telecommunications carriers (including Telstra) in those ESAs.

As noted above, the ACCC is of the view that the presence of three ULLS-based competitors (excluding Telstra); with a combined 30 per cent market share; and not-insignificant DLSAM spare capacity, will provide competitive constraint on Telstra's WLR, LCS and PSTN OA prices in the exempt ESAs.

The ACCC notes that Tribunal's Metropolitan Orders give access seekers a six month notice period after an ESA is published as an "Exempt ESA" on the ACCC's website until the exemption takes effect in that ESA. The ACCC considers that this is sufficient notice so that access seekers can make alternative arrangements where necessary for the supply of the previously regulated services. Further, since August 2009 (WLR and LCS) and September 2009 (PSTN OA) access seekers have been aware that any of the 380 Attachment A ESAs could potentially be become exempt ESAs.

The ACCC is of the preliminary view that the conditions and limitations contained in the Exemption Determinations are sufficient to ensure that the interests of access seekers will not be unduly harmed by including the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSNT OA services.

23.4 Paragraph 152BCA(1)(d) – Direct cost of providing access to the declared service

The ACCC is of the preliminary view that incorporating the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services will not be detrimental to the recovery by the access provider of its direct costs of providing the declared services.

23.5 Paragraph 152BCA(1)(e) – The value to a party of extensions, or enhancements of capability, whose cost is borne by someone else

This criterion requires the ACCC to consider the value to a party of extensions, enhancements of capability, whose cost is borne by someone else when deciding whether to incorporate the effect of the Exemption Determinations into the relevant FADs.

The ACCC is of the preliminary view this criterion is not directly relevant to its decision of whether to incorporate the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services.

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

The ACCC is of the preliminary view that the safe and reliable operation of a carriage service, a telecommunications network, or a facility will not be compromised by the incorporation of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services.

23.7 Paragraph 152BCA(1)(g) – The economically efficient operation of a carriage service, a telecommunications network or a facility

This criterion requires the ACCC to consider the economically efficient operation of a carriage service, a telecommunications network or a facility when deciding whether to incorporate the effect of the Exemption Determinations into the relevant FADs.

The ACCC has had regard to economic efficiency in relation to its LTIE assessment in section 22.1 above. As discussed above, the ACCC is of the view that incorporating the exemption determinations into the FADs for the WLR, LCS and PSTN OA services will encourage the economic efficient use of and investment in infrastructure.

The ACCC is also considers that the Exemption Determinations promote competition primarily in the markets for retail fixed voice and retail bundled voice and broadband. The ACCC considers that the promotion of competition will also encourage the efficient use of and investment in infrastructure. The Tribunal was also of the opinion that if competition is promoted then, in a case such as this, efficient investment is encouraged.³⁷⁰

23.8 Other relevant matters

The ACCC is of the preliminary view that regulatory certainty and consistency are relevant matters that the ACCC should take into account in deciding whether to incorporate the effect of the Exemption Determinations into the FADs.

It is the ACCC's preliminary view that incorporating the effect of the Exemption Determinations into the FADs for the WLR, LCS and PSTN OA services will

³⁷⁰ [2009] ACompT 2, [165].

promote regulatory certainty and consistency when moving between the old Part XIC and the amended Part XIC access regime. It is the ACCC's view that regulatory consistency supports past investment and promotes industry confidence in making future investments.

The Exemption Determinations were the result of lengthy, complex, and careful consideration by both the ACCC and the Tribunal. The Exemption Determinations were considered to be in the LTIE at the time they were made by the Tribunal and the ACCC, and were envisaged to operate until August (WLR and LCS) and September (PSTN OA) 2014.

The ACCC is of the preliminary view that Telstra and access seekers may have made investments in preparation for the exemptions coming into effect. Access seekers may have installed new DSLAM/MSAN equipment in order to provide voice services via the ULLS. Telstra is likely to have invested in new billing systems in preparation for the exemptions taken effect. The ACCC considers that regulatory certainty and consistency is necessary to protect such efficient investment, and create a certain environment to promote future efficient investment.

Part D: NBN-based wholesale services

The ACCC uses the term “NBN-based wholesale services” to refer to any wholesale services which are supplied by NBN access seekers using the NBN access network.

The ACCC seeks industry submissions on whether the FADs for the WLR, LCS, PSTN OA and PSTN TA services should apply to NBN-based wholesale services.

In particular, the ACCC seeks industry submissions on whether a transition period of regulation for these services will be necessary for voice providers to be able to interconnect with the PSTN network as well as the NBN-based network. The ACCC seeks to ensure regulatory conditions that will promote positive competition outcomes in the migration period from the CAN to the NBN.

If the ACCC decides to specify terms and conditions of access to NBN-based wholesale services in the FADs, the FADs must include terms and conditions relating to price (or a method of ascertaining a price) for those services. As the NBN-based wholesale services will not be provided over Telstra’s CAN, the FLSM will not be suitable for estimating the costs of access for those services.

As such, the ACCC will need to consider an appropriate method of ascertaining a price for the relevant NBN-based wholesale services for the purpose of the FADs. For instance, the price could be based on an NBN basic access service price and the costs the access provide would incur in developing the services which are delivered over the NBN.

Questions

13. Should the FADs for the WLR, LCS, PSTN OA and PSTN TA services apply NBN-based wholesale services?
14. Should there be a time limit on the regulation of NBN-based wholesale services? For example, should such regulation be rolled-back as competition develops, or as the roll-out of the NBN reaches completion?
15. If NBN-based wholesale services are covered by the FADs for the relevant services, what is an appropriate method of ascertaining a price for these services?

Part E: Fixed principles provisions

Part E outlines the relevant legislation in relation to fixed principles provisions, and seeks industry submissions on whether any terms and conditions in the FADs should be designated as fixed principles provisions.

24 Fixed principles provisions: relevant legislation

24.1 Fixed principles provisions

An AD may contain a provision that is specified in the determination to be a ‘fixed principles provision’.³⁷¹ Both price and non-price terms and conditions can be designated as fixed principles provisions.

An AD must specify a ‘nominal termination date’ for a fixed principles provision (which may be a date later than the expiry date for the access determination).³⁷²

The effect of specifying that a provision is a fixed principles provision is to lock in the matters dealt with in that provision until the nominal termination date.

24.2 Considerations for making fixed principles provisions

The ACCC must have regard to the criteria specified in subsection 152BCA(1) of the CCA when making an FAD, and will have regard to this criteria when deciding whether to make a provision in an FAD a fixed principles provision.

The Explanatory Memorandum to the CACS Bill notes that fixed principles provisions will enable the ACCC to provide greater regulatory certainty in certain circumstances. The Explanatory Memorandum provides the following example:

where the ACCC adopts a utility pricing model for setting the access price for a declared service – with all price determinations during the economic life of the relevant facility based on a regulated asset base – the ACCC will be able to lock in a regulated asset base for the requisite period.³⁷³

The ACCC considers that regulatory certainty will be an important and relevant consideration when deciding whether to make a provision in an FAD a fixed principles provision.

24.3 Variation of fixed principles provisions

Subsection 152CBD(5) of the CCA requires that if an AD includes a fixed principles provision, the AD must:

- provide that the AD must not be varied so as to alter or remove the fixed principles provision, or
- specify that the fixed principles provision can only be varied under specific circumstances which are specified in the AD.

³⁷¹ Subsection 152BCD(1) of the CCA.

³⁷² Subsection 152BCD(2) of the CCA.

³⁷³ Explanatory Memorandum to the CACS Bill 2010, p. 180.

Once those provisions under subsection 152CBD(5) are made, they cannot be varied or removed.³⁷⁴ An AD more generally cannot be varied in a manner that is inconsistent with the provisions made under subsection 152BCD(5).³⁷⁵

24.4 Replacement and cessation of ADs

The table below sets out what happens to a fixed principles provision when an AD is replaced and when an AD ceases to be in force.

Event	What happens to the fixed principles provision?
<p>Replacement: An AD is replaced by a new AD, and the fixed principles provision in the previous AD has not yet expired.</p>	<p>The replacement AD must include a provision in the same terms as the fixed principles provision from the previous AD.³⁷⁶</p> <p>The provision in the replacement AD must be specified as a “fixed principles provision”.³⁷⁷</p> <p>The nominal termination date included in the replacement AD must be the same as, or later than, the nominal termination date included in the previous AD.³⁷⁸</p> <p>If the previous AD specified that the fixed principles provision cannot be varied, or specified that the provision can only be varied under specific circumstances, then the replacement AD must also adopt those same terms.³⁷⁹</p>
<p>Cessation: An AD ceases to be in force before the nominal termination date for the fixed principles provisions (and is not replaced)</p>	<p>The fixed principles provision ceases to be in force when the AD ceases to be in force.³⁸⁰</p>

³⁷⁴ Paragraph 152BCN(4)(a) of the CCA.

³⁷⁵ Paragraph 152BCN(4)(b) of the CCA.

³⁷⁶ Paragraph 152BCD(3)(d) of the CCA.

³⁷⁷ Paragraph 152BCD(3)(e) of the CCA.

³⁷⁸ Paragraph 152BCD(3)(f) of the CCA.

³⁷⁹ Paragraphs 152BCD(3)(g) and (h) of the CCA.

³⁸⁰ Subsection 152BCD(4) of the CCA.

25 Fixed principles provisions in the FADs

Key points

- Setting fixed principles provisions can promote regulatory certainty, including certainty over time about the framework used to estimate access prices. Fixed principle provisions may apply to price and non-price terms and conditions.
- The ACCC has not previously consulted explicitly on making fixed principles provisions. There has, however, been extensive consultation on how a BBM approach should be implemented for estimating prices for the declared fixed line services.
- Telstra proposed a detailed set of principles for a method of setting prices in its submission to the September 2010 Draft Report.
- The ACCC considers that fixed principles provisions should be included in FADs. These provisions would 'lock in' the pricing framework and provide the industry with certainty over time about how the ACCC would estimate prices for the declared fixed line services.
- The fixed principles provisions proposed by the ACCC would 'lock in' the initial value of the RAB and specify the RAB roll-forward mechanism, the processes applied to assess forecasts of operating and capital expenditure and demand, and efficiency incentive mechanisms.

Fixed principles provisions promote regulatory certainty and may provide greater price stability. The ACCC proposes to make fixed principles provisions that terminate later than the expiry date for the FADs for the declared fixed line services.

25.1 *Setting fixed principles provisions on the pricing framework*

The fixed principles provisions proposed in this discussion paper would provide certainty over time for industry participants on the pricing framework used by the ACCC to implement a BBM approach to estimating prices for the declared fixed line services. A major rationale for moving to a BBM approach was to improve pricing certainty for all industry participants.

The ACCC recognises that it has not previously consulted explicitly on making fixed principles provisions. Such provisions were not available under the previous legislation. However, the ACCC has consulted extensively since December 2009 on the appropriate pricing framework for the declared fixed line services and on the details of how the BBM approach should be implemented.

The ACCC is of the view that including fixed principles provisions in the FADs will provide certainty about how the ACCC will estimate prices for the declared fixed line services after the end of the proposed five-year regulatory period in 2016. Certainty over time on the pricing framework will assist industry participants in their business and investment planning during the transition to the NBN.

The ACCC considers that the provisions proposed in this discussion paper will promote regulatory certainty by ensuring that the BBM approach will be implemented

consistently and predictably in future regulatory periods. Further, the ACCC considers that the proposed fixed principles provisions are likely to reduce the regulatory burden and the time required to conduct price resets by removing the need to review all aspects of the pricing framework at every price reset.

Setting fixed principles provisions can also promote price stability. An example of this is locking in the initial RAB used in the FLSM for estimating prices for the declared fixed line services. As noted in chapter 4, the continual revaluation of network assets under the previous TSLRIC+ approach created ongoing uncertainty over the level of access prices.

25.2 Telstra's proposed 'pricing principles'

Telstra's submission to the September 2010 Draft Report included a *BBM Framework for Declared Fixed Line Services—A Working Proposal* at Schedule 5. Telstra's proposal specified a detailed set of principles for setting prices. Telstra stated that its proposed 'pricing principles' were based on those contained in the National Electricity Law (NEL).³⁸¹

In general terms, Telstra proposed that prices should be set to allow it a reasonable opportunity to recover at least its efficient costs. It defined efficient costs as including a risk-adjusted return on the value of the RAB, a return of the value of the RAB, operating expenditure and the tax building block. These are the standard components of the revenue requirement under a BBM.

Telstra also proposed a number of specific principles, including:

- a regulatory period of two years with specified processes and timeframes for the ACCC's price resets
- locking in the initial RAB value
- locking in the RAB roll-forward mechanism—the proposed process was similar to that proposed by the ACCC in chapter 6, except that Telstra proposed to index the RAB value in rolling it forward
- specifying that the WACC is a nominal pre-tax WACC
- fixing values for most of the WACC parameters and specifying the method used to estimate the inflation rate, the risk-free rate and the DRP used for each price reset
- a process for Telstra to submit all other required inputs (that is, forecast operating and capital expenditures, forecast demands for services and cost allocation factors) with limited provision for ACCC revision and assessment.

25.3 ACCC's proposed fixed principles provisions on the pricing framework

The ACCC proposes to make fixed principles provisions that specify the method of estimating prices using a BBM approach. In developing its views, the ACCC has considered pricing principles and rules adopted for other industries by regulators, including the ACCC and AER.

³⁸¹ The NEL is available at: <http://www.legislation.sa.gov.au>. The NEL is contained in a Schedule to the National Electricity (South Australia) Act 1996. The NEL is applied as law in each participating jurisdiction of the NEM by application statutes.

To assist interested parties, the ACCC has developed preliminary proposals on the fixed principles provisions that could be included in FADs. While submissions have already been made on some of these provisions (such as locking in the RAB value), others have not previously been considered by industry as part of the ACCC's consultation processes. The ACCC seeks views on the matters that should be included as fixed principles provisions as well as specific suggestions on the design of the provisions.

25.3.1 Initial RAB value

In its December 2009 Discussion Paper and September 2010 Draft Report, the ACCC proposed to lock in the initial RAB value, and roll it forward using a specified roll-forward mechanism. There was industry general agreement that locking in the RAB value would promote certainty in the ACCC's pricing approach.

The ACCC notes that, in adopting BBM approaches for other industries, regulators have typically locked in the initial RAB value. For example, the ACCC has proposed that a locked-in RAB value should be a pricing principle in regulating water businesses:

Once a RAB value is set it must not be subject to revaluation. Revaluation creates uncertainty for the regulated business and its customers and can result in price shocks and windfall gains or losses to the business.³⁸²

Locked in RAB values have also been implemented by the AER for the regulated energy businesses and by state regulators, such as the Essential Services Commission of Victoria and the Independent Pricing and Regulatory Tribunal (IPART) of New South Wales, for industries including water and energy.

The ACCC proposes that the RAB value, once set, should not be subject to revaluation. Revaluation of an existing RAB could create uncertainty for Telstra and its customers, including access seekers. It could also result in price shocks and windfall gains or losses to industry participants. Further, the periodic revaluation of sunk assets could result in Telstra facing an unpredictable revenue stream that could deter efficient investment.

The ACCC proposes to lock in the RAB for future regulatory periods by making a fixed principles provision. The ACCC considers that this will contribute to continuity and predictability in moving from one regulatory period to the next.

25.3.2 RAB roll-forward mechanism

Once the initial RAB value has been set, it will need to be updated each year to reflect forecast capital expenditure, depreciation and asset disposals. A fixed method of calculating how the opening RAB value for each year will be rolled forward will promote certainty and predictability. The mechanism should not allow scope for revaluing the RAB. This will ensure that the initial RAB value is locked in, as proposed in section 25.3.1 above.

In chapter 6 of this Discussion Paper, the ACCC proposed the following roll-forward mechanism:

³⁸² ACCC, *ACCC pricing principles for price approvals and determinations under the water charge (infrastructure) charge rules*, draft, January 2011, p. 19.

$$RAB_{t+1} = RAB_t + capex_t - depreciation_t - asset\ disposals_t$$

where RAB_{t+1} = opening RAB for the next regulatory year

RAB_t = opening RAB for the current year

$capex_t$ = forecast capital expenditure during the current year (after the half-WACC adjustment)

$depreciation_t$ = depreciation during the current year

$asset\ disposals_t$ = asset disposals during the current year

The opening RAB for the next regulatory year is equal to the closing RAB for the current year.

The ACCC proposes that this roll-forward mechanism be included as a fixed principles provision.

25.3.3 Operating and capital expenditure forecasts

In this discussion paper, the ACCC has proposed processes for assessing Telstra's forecasts of operating and capital expenditure (see sections 7.3.4 and 6.2.5 respectively). These processes will ensure that the forecasts adopted by the ACCC for estimating prices in the FLSM will reflect prudent and efficient costs.

The ACCC considers that the processes it will adopt for assessing the prudence and efficiency of forecasts provided by Telstra, either through an RKR or by other means, should be included as fixed principles provisions. For operating expenditure forecasts, the provision would state that:

Forecasts for operating expenditures during the regulatory period must be based on reasonable assumptions of the efficient costs likely to be incurred in this period. In making an assessment of the prudent and efficient operating expenditure for the next regulatory period, the ACCC will take into account:

- the access provider's level of operating expenditure in the previous regulatory period
- the reasons and evidence supporting changes to operating expenditure in the next regulatory period and
- any other relevant information.

For capital expenditure forecasts, the provision would state that:

Forecasts for capital expenditures during the regulatory period must be based on reasonable assumptions of the efficient costs likely to be incurred in this period. In making an assessment of the prudent and efficient capital expenditure for the next regulatory period, the ACCC will take into account:

- the access provider's level of capital expenditure in the previous regulatory period
- the reasons and evidence supporting changes to operating expenditure in the next regulatory period
- whether the access provider's asset management and planning framework reflects best practice and
- any other relevant information.

The ACCC proposes that details on the nature and timing of the operating and capital expenditure forecasts, and supporting evidence, required from Telstra will be specified in a BBM RKR (see chapter 4).

The ACCC seeks submissions on whether or not to make a fixed principles provision that states that in the next regulatory period, no adjustments will be made to compensate the access provider for, or recoup from the access provider, any differences between actual and forecast operating and capital expenditures in the previous regulatory period. Such a provision would implement the efficiency benefit sharing scheme proposed in sections 6.2.5 and 7.3.4 of this discussion paper.

The ACCC seeks submissions on whether or not a fixed principles provision should be made to allow for cost pass-throughs, in defined circumstances, in relation to uncontrollable and unforeseeable events that have a significant and material impact on the access provider's costs. An example would be a major natural disaster or act of terrorism.

25.3.4 Weighted average cost of capital

As noted in chapter 4, the FLSM undertakes the majority of the price estimation calculations in real terms. A real vanilla WACC must be applied for consistency with the real approach adopted in the FLSM. The formula for the vanilla WACC is set out in chapter 6.

To ensure continued consistency with the FLSM, the ACCC proposes to make a fixed principles provision specifying that a real vanilla WACC is used in estimating prices.

The ACCC has not included values for specific WACC parameters in the draft FADs. Below are the preliminary views of the ACCC on how these parameters could be specified in fixed principles provisions. The ACCC seeks submissions on whether or not WACC parameters or methods for determining them should be included as fixed principles provisions.

Cost of equity

For certainty, and for consistency with the ACCC's general regulatory approach, the ACCC proposes that the cost of equity is to be estimated using the domestic CAPM.

Risk-free rate: For consistency and predictability, the ACCC's preliminary view is that the risk-free rate is based on the yield of a 10 year CGS bond, using an averaging period of between 10-40 business days commencing as close as practically possible to the start of the regulatory period.

Specifying a range for the averaging period will give the ACCC some flexibility to use a longer or shorter period, if considered necessary to address financial market volatility or to exclude extraordinary events. The ACCC would consult on an appropriate averaging period within the specified range during its price reset consultation.

Market risk premium: The ACCC's preliminary view is that the MRP is based on a long-term historical average value.

Equity beta: The equity beta used in estimating prices is a benchmark value that typically does not change significantly over time.

The ACCC's preliminary view is that the equity beta should be set in reference to an appropriate benchmark value.

Equity issuance costs: As noted in chapter 6 of this Discussion Paper, the ACCC considers that equity issuance costs should be recovered as a cash flow (operating expenditure) allowance when Telstra raises equity capital.

Cost of debt

Debt risk premium: The DRP is a benchmark that reflects the efficient cost of debt of a telecommunications business. The ACCC's preliminary view is that the following method of calculating the benchmark DRP should be used in the FLSM.

The proposed method would require that the DRP be estimated on the basis of the benchmark gearing level on the yields of relevant corporate bonds with a 10 year maturity to match the term of the risk free rate. The averaging period used in estimating the DRP would be the same as that used in estimating the risk-free rate. This method would ensure consistency in the approaches used to estimate the DRP and the risk-free rate.

The relevant corporate bonds would have the same credit rating as that applicable to a benchmark telecommunications business. The AER has stated that the benchmark credit rating applicable to a regulated business 'must be estimated and cannot be determined with certainty.'³⁸³ Telstra has proposed that the credit rating used to estimate the DRP should be Telstra's credit rating from Standard and Poor's observed over the same averaging period used to estimate the risk-free rate.

Gearing level: The debt-equity ratio of 40:60 proposed in this discussion paper (chapter 6) is a benchmark and is not therefore expected to vary significantly over time. Fixing this benchmark value as a fixed principles provision would promote regulatory certainty and consistency. It would also provide an incentive for the access provider to implement more efficient capital financing arrangements. The ACCC seeks submissions on whether or not this should be a fixed principles provision.

Debt issuance costs: To estimate debt issuance costs, the ACCC and the AER employ a methodology set out in the 2004 Allen Consulting Group's (ACG) report 'Debt and equity raising transaction costs'. The estimated debt issuance costs are periodically updated using this methodology. The ACCC seeks views on whether this methodology should be a fixed principles provision.

Debt beta: The ACCC has previously used a debt beta of zero after consulting with industry. The ACCC proposes that a fixed principles provision specify that the debt beta is zero.

Gamma

The value of gamma cannot be estimated with any certainty due to the wide range of empirical estimates. The ACCC seeks submissions on whether a fixed principles provision is appropriate for gamma.

25.3.5 Tax

In the FLSM, tax is calculated according to benchmark parameters. The benchmark approach relies on setting the initial opening tax asset value equal to the initial opening RAB and then rolling it forward. The ACCC proposes to make a fixed principles provision that sets the initial opening tax RAB as at 1 July 2009 equal to the initial opening RAB as at 1 July 2009 and that the tax RAB is rolled forward.

³⁸³ Australian Energy Regulator, *Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters*, May 2009, p. 346.

The ACCC considers that a fixed principles provision should specify that the tax rate used in determining tax liabilities in the BBM will be set equal to the corporate tax rate specified in legislation.³⁸⁴

25.3.6 Demand forecasts

The ACCC considers that a fixed principles provision should be made to specify the process for assessing the access provider's demand forecasts. The ACCC's preliminary view is that the provision would state that:

In forecasting demand for the declared fixed line services for the next regulatory period, the ACCC will take into account any forecasts provided by the access provider. In assessing the access provider's forecasts, the ACCC will consider whether the forecasts provided by the access provider:

- are based on an appropriate forecasting methodology
- are based on reasonable assumptions about the key drivers of demand
- utilise the best available information, including historical data that can identify trends in demand, and
- take account of current demand and economic conditions.

The ACCC proposes that details on the nature and timing of the demand forecasts, and supporting evidence, required from Telstra will be specified in a BBM RKR (see chapter 4).

25.3.7 Cost allocation factors

The ACCC considers that a fixed principles provision should be made on the calculation of cost allocation factors for the declared fixed line services. The ACCC's preliminary view is that the provision would state that:

- The allocation of the costs of operating the PSTN should reflect the relative usage of the network by various services to the extent that it is possible to obtain reliable information on their usage of the network.
- To the extent it is possible to obtain reliable information on the direct costs incurred in providing specific services, direct costs should be attributed to the service to which they relate and not more than once to any category of service.
- The cost allocation factors for shared costs should reflect causal relationships between supplying services and incurring costs where such relationships can be reliably identified without undue cost and effort.
- No cost should be allocated more than once to any service.

25.4 *Setting fixed principle provisions for non-price terms and conditions*

Since the ACCC has not previously consulted on non-price terms and conditions, it has not considered, at this stage, if fixed principles provisions should be made in respect of non-price terms. It seeks industry views on whether any non-price issues should be addressed in fixed principles provisions.

³⁸⁴ Subsection 23(2), *Income Tax Rates Act 1986* (Cth).

25.5 Nominal termination date for fixed principles provisions

Subsection 152BCD(2) requires that there must be a nominal termination date for fixed principles provisions. This date can be later than the expiry date of access determinations.

The ACCC's preliminary view is that the nominal termination date should be 30 June 2021. This means that the fixed principles provisions will apply for a ten year period. The ACCC considers that this will give the industry certainty during the transitional period to the NBN. Extending the fixed principles provisions past the proposed expiry of the initial regulatory period will ensure that prices are calculated in a consistent manner in subsequent regulatory periods.

Questions

16. What fixed principles provisions should be included in FADs in respect of the pricing framework?
17. Should any non-price terms and conditions be included in fixed principle provisions in the FADs? If yes, give details.
18. What 'nominal termination date' should be set for these provisions?

Appendix A: Description of the fixed line services

Following are brief descriptions for each of the fixed line services that are covered by this review. The full service descriptions for each service can be found in the ACCC's *Fixed Services Review Declaration Inquiry* (July 2009) (available from the ACCC's website: <http://www.accc.gov.au>).

ULLS

The ULLS is a service for access to unconditioned cable, usually a copper wire pair, between an end user and a telephone exchange. The ULLS essentially gives an access seeker the use of the copper pair without any dial tone or carriage service. This allows the access seeker to use its own equipment in an exchange to provide a range of services, including traditional voice services and high speed internet access, to end-users connected at the exchange. The ULLS has been a declared service since 1999 and was redeclared in 2006.³⁸⁵ In July 2009, the declaration was extended for a further five-years until 31 July 2014.³⁸⁶

WLR

The WLR service allows access seekers to resell the basic line rental service that allows an end-user to connect to the traditional voice network, make and receive calls and have a telephone number. The WLR was first declared in 2006, excluding the CBD areas of Sydney, Melbourne, Brisbane, Adelaide and Perth.³⁸⁷ In July 2009, the declaration was extended for a further five-years until 31 July 2014.³⁸⁸

LSS

Line sharing is where two separate carriers provide separate services over a single copper line. The copper line spectrum is normally split (or shared) so that:

- one carrier or service provider provides the voice services over the line
- the LSS access seeker provides high-speed broadband services, through the use of its own xDSL technology, over the higher frequency part of the copper line.

The LCS has been a declared service since 2002 and was redeclared in 2007.³⁸⁹ In July 2009, the declaration was extended for a further five-years until 31 July 2014.³⁹⁰

PSTN OTA

The PSTN OA service is the carriage of telephone calls from the calling party to a point of interconnection (POI) within an access seeker's network. The PSTN TA is the carriage of telephone calls from a POI within an access seeker's network to the party receiving the call. Access seekers currently use PSTN OA and TA services to provide the following services:

³⁸⁵ ACCC, *Declaration inquiry for the ULLS, PSTN OTA and CLLS – Final determination*, July 2006.

³⁸⁶ ACCC, *FSR Declaration Inquiry*, July 2009.

³⁸⁷ ACCC, *Local Services Review–Final decision*, July 2006.

³⁸⁸ ACCC, *FSR Declaration Inquiry*, July 2009.

³⁸⁹ ACCC, *LSS – Final decision on whether or not a LSS should be declared under Part XIC of the TPA*, August 2002; ACCC, *Review of the Line Sharing Service Declaration – Final Decision*, October 2007.

³⁹⁰ ACCC, *FSR Declaration Inquiry*, July 2009.

- national long-distance calls
- international calls
- mobile phone to fixed network calls
- fixed network to mobile network calls, and
- local calls.

The PSTN OTA has been a declared service since 1997 and was redeclared in 2006.³⁹¹ In July 2009, the declaration was extended for a further five-years until 31 July 2014.³⁹²

LCS

The LCS is a service for the supply of an end-to-end voice grade carriage service between two points within a standard zone. It allows access seekers to resell local calls to end-users without the need for deploying substantial alternative infrastructure. Commercially, the LCS is generally sold with the WLR. The LCS has been a declared service since 1999³⁹³ and was redeclared in 2006³⁹⁴ excluding the CBD areas of Sydney, Melbourne, Brisbane, Adelaide and Perth.³⁹⁵ In July 2009, the declaration was extended for a further five-years until 31 July 2014.³⁹⁶

³⁹¹ ACCC, *Declaration inquiry for the ULLS, PSTN OTA and CLLS – Final determination*, July 2006.

³⁹² ACCC, *FSR Declaration Inquiry*, July 2009.

³⁹³ ACCC, *Declaration of local telecommunications services*, July 1999.

³⁹⁴ ACCC, *Local Services Review – Final Decision*, July 2006.

³⁹⁵ Note the variation of the declaration was in recognition of the previous exemption granted to the LCS in the CBD areas. See: ACCC, *Future scope of the local carriage service – final decision*, July 2002.

³⁹⁶ ACCC, *FSR Declaration Inquiry*, July 2009.

Appendix B: Submissions to December 2009 Discussion Paper and September 2010 Draft Report

Submissions received in response to December 2009 Discussion Paper

Competitive Carriers Coalition, *Submission to ACCC Discussion Paper: Review of 1997 Access Pricing Principles for Fixed Line Services*, February 2010.

Frontier Economics (on behalf of the Competitive Carriers Coalition), *Access pricing principles for fixed line services – A response to the ACCC's Discussion Paper prepared for the CCC*, February 2010.

Macquarie Telecom, *Submission in response to the ACCC's Discussion Paper*, February 2010.

Optus, *Optus Submission to Australian Competition and Consumer Commission in response to discussion paper: Telecommunications Access Pricing Principles for Fixed Line Services*, February 2010.

Optus, *Telecommunications Access Pricing Principles for Fixed Line Services – Letter to the ACCC*, 17 May 2010.

Optus, *Review of Access Pricing Principles for Fixed Line services – Letter to the ACCC*, 13 July 2010.

CEG (on behalf of Optus), *Reform of Part XIC: Regulatory Certainty – Increasing regulatory certainty for telecommunications assets in Australia – A report for Optus*, June 2009.

CEG (on behalf of Optus), *Past cost recovery and asset valuation – A report for Optus*, March 2010.

CEG (on behalf of Optus), *Access price flexibility with a vertically integrated access provider – A report for Optus*, March 2010.

NERA (on behalf of Optus), *Role of TSLRIC in telecommunications regulation – A report for Optus*, July 2003.

Telstra, *Review of 1997 Guide to Telecommunications Access Pricing Principles for Fixed Line Services – Telstra's response to the ACCC's Discussion Paper*, 26 February 2010.

TransACT, *Submission to the ACCC's Discussion Paper: Review of 1997 Access Pricing Principles for Fixed Line Services*, 26 February 2010.

VHA, *Review of Pricing Principles for Fixed Line Services – Submission to the Australian Competition and Consumer Commission*, February 2010.

Submissions received in response to September 2010 Draft Report

AAPT, *Submission by AAPT Limited to the Australian Competition and Consumer Commission's Draft Report Titled Review of the 1997 telecommunications access pricing principles for fixed line services*, September 2010.

Frontier Economics (on behalf of the Competitive Carriers Coalition), *Submission on the ACCC's draft report – Review of fixed line pricing principles – A Report Prepared for the Competitive Carriers' Coalition*, October 2010.

Herbert Geer (on behalf of iiNet, Internode and Adam Internet), *Review of the 1997 telecommunications access pricing principles for fixed line services – Submissions on behalf of iiNet*,

Internode and Adam Internet, October 2010.

Joe Terranova, *Submission on the Review of Access Pricing Principles for Fixed Line Services – draft report*, 5 October 2010.

M2 Telecommunications, *Submission to the ACCC in response to the Draft Report: Telecommunications Access Pricing Principles for Fixed Line Services*, October 2010.

Macquarie Telecom, *Review of the 1997 telecommunications access pricing principles for fixed line services*, 22 October 2010.

Optus, *Submission to ACCC in response to the Draft Report – Telecommunications Access Pricing Principles for Fixed Line Services*, October 2010.

Optus, *Draft Pricing Principles for Fixed Line Services – PSTN Rate Structure*, September 2010.

CEG (on behalf of Optus), *De-averaging ULLS prices – A report for Optus*, November 2010.

RBS, *Submission on ACCC Review of the 1997 Telecommunications Access Pricing Principles for Fixed Line Services, Draft Report, September 2010*, October 2010.

Telstra, *Pricing Principles for Fixed Line Services: Response to the ACCC's Draft Report*, October 2010.

(D)ORC Calculations spreadsheet (confidential), October 2010.

(D)IHC Calculation spreadsheet (confidential), October 2010.

Documentation for indexed historic cost calculation, October 2010.

Covec (on behalf of Telstra), *Approaches to determining Telstra's Regulated Asset Base*, October 2010.

Gilbert + Tobin (on behalf of Telstra), *Review of the 1997 telecommunications access pricing principles for fixed line services*, October 2010.

Schedule 1: *Asset valuation, depreciation and cost recovery*

Schedule 2: Deloitte (on behalf of Telstra),: *Bruce Porter, Deloitte Touche Tomatsu, Expert advice re: use of written down accounting value of fixed network assets*

Schedule 3: *Determining an initial RAB valuation – Implication of Application by Telstra Corporation Limited [2010] ACompT 1*

Schedule 4: *Review of Australian regulatory precedent in setting initial RAB values*

Schedule 5: *Trade Practices Act 1974 – BBM framework for declared fixed network services – A working proposal*

Schedule 6: *A comparison of implementation approaches: the NEL building blocks framework, the ACCC BBM and Telstra's BBM working proposal*

Schedule 7: RBB Economics (on behalf of Telstra): *George Siolis, RBB Economics: Service lives for Telstra's fixed network assets, October 2010*

Schedule 8: KPMG (on behalf of Telstra): *Craig Mickle, KPMG: Preliminary assessment of the Ovum-BBM cost model – Calculation of the effective tax rate, 21 October 2010*

Schedule 9: *Telstra analysis of WLR/LCS price trend and expectations*

Schedule 10: *Telstra Commercial in Confidence information (confidential)*.

Schedule 11: *CCA distribution table (confidential)*

Telstra, *Pricing Principles for Fixed Line Services: Supplementary response to the ACCC's Draft Report*, November 2010.

Telstra, *Fixed Line Pricing Principles review – Request for ACCC's analysis (Letter from Telstra to Mr John Skinner)*, 22 September 2010.

Telstra, *Pricing Principles for Fixed Line Services: Response to the ACCC's request for further information (confidential)*, November 2010.

Schedule 1: *Excluded assets spreadsheet (confidential)*

Schedule 2: *Included assets spreadsheet (confidential)*

Schedule 3: *Regulatory Accounting Procedures Manual for the Regulatory Accounting Framework (RAPM-RAF) (confidential)*

Schedule 4: *Opex spreadsheet (confidential)*

Schedule 5: *Capex spreadsheet (confidential)*

Schedule 6: *Indirect capital spreadsheet (confidential)*

Schedule 7: *Operations and maintenance and indirect cost factor study – April 2008 (confidential)*

Schedule 8: NERA (on behalf of Telstra): *Expert Report of Nigel Attenborough, October 2009 (confidential)*

Schedule 9: *Depreciation spreadsheet (confidential)*

Schedule 10: *LSS spreadsheet (confidential)*

Schedule 11: *Real economic returns spreadsheet (confidential)*

Schedule 12: *Estimating the cost of capital for Crown entities and State-owned enterprises: A handbook prepared for the Treasury October 1997 (confidential)*

Tim Hogard (Wide Blue Ocean), *Fixed line prices...costs with free local calls*, 18 September 2010.

TPG, *Submission on draft pricing principles*, 22 October 2010.

VHA, *Review of Access Pricing Principles for Fixed Line Services – Submission to the Australian Competition and Consumer Commission*, October 2010.

Appendix C: Draft FAD instruments for the declared fixed line services



[DRAFT]

Final Access Determination No. X of 2011 (LSS)
Final Access Determination No. X of 2011 (LCS)
Final Access Determination No. X of 2011 (PSTN OA)
Final Access Determination No. X of 2011 (PSTN TA)
Final Access Determination No. X of 2011 (ULLS)
Final Access Determination No. X of 2011 (WLR)

Competition and Consumer Act 2010

The AUSTRALIAN COMPETITION AND CONSUMER COMMISSION makes these final access determinations under section 152BC of the *Competition and Consumer Act 2010*.

Date of decision:

1. Application

1.1 This instrument sets out final access determinations in respect of the declared services ('relevant declared service') specified in the table.

Declared service	Expiry of declaration	Title of final access determination	Applicable schedules
Line Sharing Service ('LSS')	31 July 2014	Final Access Determination No. X of 2011 (LSS)	1, 2, 8, 9, 10, 11, 12, 13, 14, 16
Local Carriage Service ('LCS')	31 July 2014	Final Access Determination No. X of 2011 (LCS)	1, 3, 8, 9, 10, 11, 12, 13, 14
Domestic PSTN Originating Access Service ('PSTN OA')	31 July 2014	Final Access Determination No. X of 2011 (PSTN OA)	1, 4, 8, 9, 10, 11, 12, 13, 14
Domestic PSTN Terminating Access Service ('PSTN TA')	31 July 2014	Final Access Determination No. X of 2011 (PSTN TA)	1, 5, 8, 9, 10, 11, 12, 13, 14
Unconditioned Local Loop Service ('ULLS')	31 July 2014	Final Access Determination No. X of 2011 (ULLS)	1, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16
Wholesale Line Rental Service ('WLR')	31 July 2014	Final Access Determination No. X of 2011 (WLR)	1, 7, 8, 9, 10, 11, 12, 13, 14

1.2 These FADs do not apply to WLR services provided by a carrier or carriage service provider over the National Broadband Network.

Note:

- From 1 January 2011:
 - a carrier licence held by a carrier is subject to a condition that the carrier must comply with any access determinations that are applicable to the carrier; and
 - a carriage service provider must comply with any access determinations that are applicable to the provider.
- An Access Provider and Access Seeker may enter into an Access Agreement relating to a declared service. Access Agreements prevail over inconsistent access determinations: section 152BCC of the *Competition and Consumer Act 2010*.
- The declared services that are the subject of these final access determinations are commonly referred to as the 'fixed line services'.

2. Definitions and interpretation

- 2.1 Schedule 1 applies to the interpretation of this instrument. The Schedules form part of this instrument.

3. Commencement and duration

- 3.1 These final access determinations commence on 1 January 2011.
- 3.2 These final access determinations remain in force up until and including 30 June 2016.

Note:

1. An access determination may come into force on a day which is earlier than the day the determination is made: subsections 152BCF(1) and 152BCF(2) of the *Competition and Consumer Act 2010*.
 2. These final access determinations revoke the interim access determinations for the declared services, made on 2 March 2011 by the operation of subsection 152BCF(9A) of the *Competition and Consumer Act 2010*.
- 3.3 The terms, including price and non-price terms, conditions and limitations set out in these final access determinations do not have effect in respect of each relevant declared service in relation to the time period 1 August 2014 to 30 June 2016, unless by 1 August 2014 the Australian Competition and Consumer Commission ('ACCC') makes a decision to:
- (a) extend or further extend the expiry date of the declaration for the relevant declared service; or
 - (b) allow the declaration to expire and to make a new declaration for the relevant declared service
- under 152AL of the *Competition and Consumer Act 2010*.

4. Terms and conditions of access

- 4.1 If a carrier or carriage service provider is required to comply with any or all of the standard access obligations in respect of a relevant declared service, the carrier or carriage service provider must comply with those obligations on the terms and conditions set out in this clause 4.

Note: The terms and conditions in a final access determination apply only to those terms and conditions where an Access Agreement cannot be reached, no special access undertaking is in operation and no binding rules of conduct have been made: section 152AY of the *Competition and Consumer Act 2010*.

- 4.2 If the carrier or carriage service provider is required to supply the relevant declared service to a service provider, the carrier or carriage service provider must supply the service:
- (a) at the price specified in the applicable schedule set out in the table below; and

Declared service	Applicable schedule
LSS	2
LCS	3
PSTN OA	4
PSTN TA	5
ULLS	6
WLR	7

- (b) on the non-price terms and conditions specified in the applicable schedules set out in the table below.

Declared service	Applicable schedules
LSS	8, 9, 10, 11, 12, 13, 14, 16
LCS	8, 9, 10, 11, 12, 13, 14
PSTN OA	8, 9, 10, 11, 12, 13, 14
PSTN TA	8, 9, 10, 11, 12, 13, 14
ULLS	8, 9, 10, 11, 12, 13, 14, 15, 16
WLR	8, 9, 10, 11, 12, 13, 14

4.3 This clause 4 is subject to clause 5.

5. Limitation on final access determination – previous exemptions

5.1 This clause applies where a determination ('exemption'):

- (a) was made under section 152AS or 152AT of the *Competition and Consumer Act 2010*; and
- (b) was in force immediately before these final access determinations came into force,

to the extent that the determination relates to a relevant declared service.

5.2 The standard access obligations do not apply to a carrier or carriage service provider in respect of a relevant declared service to the extent that the exemption would have applied under item 202 or 203 of Schedule 1 to the *Telecommunications Legislation (Competition and Consumer Safeguards) Act 2010* prior to an access determination in relation to that service coming into force.

5.3 This clause 5 continues the operation of the following exemptions as part of these final access determinations:

- (a) LCS, PSTN OA and WLR class exemptions as varied by the ACCC on 18 November 2009; and
- (b) The Australian Competition Tribunal's ('Tribunal') LCS, PSTN OA and WLR 2009 individual exemptions orders as made, affirmed and varied on 24 August 2009 (in the case of LCS and WLR) and 9 September 2009 (in the case of PSTN OA)

5.3 For the avoidance of doubt:

- (a) clause 5.2 is subject to any conditions or limitations specified in the exemptions; and
- (b) these final access determinations provide for the ACCC to perform the following functions, and exercise the following powers, in order to continue the operation of the exemptions in accordance with clause 5.2:
 - (i) collect data from industry on a six-monthly basis for the purpose of calculating which ESAs are to be 'Exemption ESAs' for the purpose of the exemptions;
 - (ii) make the necessary calculations to determine which ESAs are Exemption ESAs for the purpose of the exemptions; and
 - (iii) publish on its website a list of those Exemption ESAs in accordance with the exemptions.

5.4 This clause 5 expires:

- (a) on 24 August 2014 in relation to the WLR and the LCS FADs; and
- (b) on 9 September 2014 in relation to the PSTN OA FAD.

Note:

1. Prior to 1 January 2011, sections 152AS and 15A2T of the *Competition and Consumer Act 2010* provided for the ACCC to make ordinary class exemptions and ordinary individual exemptions from the standard access obligations. These sections were repealed by the *Telecommunications Legislation (Competition and Consumer Safeguards) Act 2010* from 1 January 2011. Items 202 and 203 of Schedule 1 to that Act set out transitional arrangements. Under these provisions, the exemptions continue to have effect until the first access determination relating to access to the relevant declared service comes into force. An access determination may:

- provide that any or all of the standard access obligations are not applicable to a carrier or carriage service provider (either unconditionally or subject to conditions or limitations); or
- restrict or limit the application to a carrier or carriage service provider of any or all of the standard access obligations.

An access determination may also provide for the ACCC to perform functions, and exercise powers, under the determination: section 152BC of the *Competition and Consumer Act 2010*.

2. These exemptions provide for the ACCC to calculate 'Exemption ESAs' every six Months and publish a list of those Exemption ESAs on the ACCC's website. See: <http://www.accc.gov.au/content/index.phtml/itemId/934407>

6. Fixed principles provisions

- 6.1 This clause 6 sets out fixed principles provisions that apply to the six FADs contained in this document.

- 6.2 The six FADs contained in this document must not be varied so as to remove or alter any of the fixed principles provisions below.
- 6.3 The below fixed principles provisions apply from 1 January 2011. The nominal termination date for the fixed principles provisions is 30 June 2021.
- 6.4 The initial opening regulatory asset base (RAB) for the calculation of prices for the six declared fixed line services is \$17.75 billion as at 1 July 2009.
- 6.5 The RAB is to be rolled forward each year according to the formula below:

$$RAB_{t+1} = RAB_t + capex_t - depreciation_t - asset\ disposals_t$$

where RAB_{t+1} = opening RAB for the next regulatory year

RAB_t = opening RAB for the current year

$capex_t$ = forecast capital expenditure during the current year (after the half-WACC adjustment)

$depreciation_t$ = depreciation during the current year

$asset\ disposals_t$ = asset disposals during the current year

- 6.6 Forecasts for operating expenditures during the regulatory period must be based on reasonable assumptions of the efficient costs likely to be incurred in this period. In making an assessment of the prudent and efficient operating expenditure for the next regulatory period, the ACCC will take into account:
- the access provider's level of operating expenditure in the previous regulatory period,
 - the reasons and evidence supporting changes to operating expenditure in the next regulatory period, and
 - any other relevant information.
- 6.7 Forecasts for capital expenditures during the regulatory period must be based on reasonable assumptions of the efficient costs likely to be incurred in this period. In making an assessment of the prudent and efficient capital expenditure for the next regulatory period, the ACCC will take into account:
- the access provider's level of capital expenditure in the previous regulatory period,
 - the reasons and evidence supporting changes to capital expenditure in the next regulatory period,
 - whether or not the access provider's asset management and planning framework reflects best practice, and
 - any other relevant information.
- 6.8 A real vanilla weighted average cost of capital (WACC) will be used in estimating prices.
- 6.9 The initial opening tax RAB at 1 July 2009 is to be set equal to the initial opening RAB as at 1 July 2009, as specified in clause 6.4. The tax RAB is to be rolled forward.

- 6.10 The tax rate used in determining tax liabilities in the building block model will be set equal to the corporate tax rate as specified in subsection 23(2) of the *Income Tax Rates Act 1986* (Cth).
- 6.11 In forecasting demand for the declared fixed line services for the next regulatory period, the ACCC will take into account any forecasts provided by the access provider. In assessing the access provider's forecasts, the ACCC will consider whether the forecasts provided by the access provider:
- (a) are based on an appropriate forecasting methodology,
 - (b) are based on reasonable assumptions about the key drivers of demand,
 - (c) utilise the best available information, including historical data that can identify trends in demand, and
 - (d) take account of current demand and economic conditions.
- 6.12 Cost allocation factors
- (a) The allocation of the costs of operating the PSTN should reflect the relative usage of the network by various services to the extent that it is possible to obtain reliable information on their usage of the network.
 - (b) To the extent it is possible to obtain reliable information on the direct costs incurred in providing specific services, direct costs should be attributed to the service to which they relate and not more than once to any category of service.
 - (c) The cost allocation factors for shared costs should reflect causal relationships between supplying services and incurring costs where such relationships can be reliably identified without undue cost and effort.
 - (d) No cost should be allocated more than once to any service.

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Schedule 1 – Interpretation & Definitions

Interpretation

In these FADs, unless the contrary intention appears:

- (a) the singular includes the plural and vice versa;
- (b) the words “including” and “include” mean “including, but not limited to”; and
- (c) terms defined in the CCA or the *Telecommunications Act 1997* have the same meaning.

Definitions

ACCC means the Australian Competition and Consumer Commission

Access Agreement has the same meaning as given to that term in section 152BE of the CCA

Access Provider has the same meaning as given to that term in subsection 152AR(2) of the CCA

Access Seeker has the same meaning as given to that term in section 152AG of the CCA

ACDC means the Australian Commercial Disputes Centre Limited

ACDC Guidelines means the mediation guidelines of the ACDC as specified in clause 10.10 of Schedule 10

ACMA means the Australian Communications and Media Authority

Band means the geographic classification of exchange service areas (ESAs)

Band 1 means the following ESAs located in central business districts:

- (a) NSW (City South, Dalley, Haymarket, Pitt, Kent);
- (b) QLD (Charlotte, Edison, Roma Street, Spring Hill);
- (c) South Australia (Flinders, Waymouth);
- (d) Victoria (Batman, Exhibition, Lonsdale); and
- (e) WA (Bulwer, Pier, Wellington)

Band 2 means an ESA with more than 108.4 services in operation in a square kilometre area at the time this determination is made, which is not a Band 1 ESA

Band 3 means an ESA with 6.56 or more, but less than 108.4, services in operation in a square kilometre area at the time this determination is made

Band 4 means an ESA with 6.55 or less services in operation in a square kilometre area at the time this determination is made.

Note: These Band definitions are taken from Annexure A (Key Performance Indicators Operational Document) to Telstra's Service Quality Strategy dated 23 June 2006 (available at http://telstrawholesale.com//dobusiness/customer-commitment/docs/op_sep_quality_strategy.pdf).

Billing Dispute means a dispute relating to a Charge or an invoice issued by the Access Provider

Billing Dispute Notice means a notice given pursuant to clause 8.11 in Schedule 8

Billing Dispute Procedures means the procedures set out in clauses 8.11 to 8.29 in Schedule 8

Breach Notice has the meaning set out in clause 14.5 of Schedule 14

Business Hours means 8.00 am to 5.00 pm Monday to Friday, excluding a day which is a gazetted public holiday in the place where the relevant transaction or work is to be performed

Business Day means any day other than Saturday or Sunday or a day which is a gazetted public holiday in the place concerned

Calendar Day means a day reckoned from midnight to midnight

CAN means a customer access network

Capped Exchange means an exchange that is included on a list that the Access Provider has published of exchanges that are subject to capacity constraints

Carriage Service has the same meaning given to that term in section 7 of the *Telecommunications Act 1997 (Cth)*

CCA means the *Competition and Consumer Act 2010 (Cth)*

Charge means a charge for the supply of a Service

Common Infrastructure Works means where an Access Seeker increases the capacity of existing Facilities at an Exchange that could be used by itself and other service providers.

Complex Service means any service which is not a fixed service comprising:

- (a) a connection from a carrier or carriage service provider network boundary to the local exchange;
- (b) a telephone number; and
- (c) access to other kinds of telecommunication services which is indicated by dial-tone

Connect Outstanding process has the meaning set out in clauses 16.24 and 16.25 of Schedule 16

Confidential Information means all information, know-how, ideas, concepts, technology, manufacturing processes, industrial, marketing and commercial knowledge of a confidential nature (whether in tangible or intangible form and whether coming into existence before or after the commencement of this FAD) relating to or developed in connection with or in support of the business of a party (the **first mentioned party**) but does not include:

- (a) information which is or becomes part of the public domain (other than through any breach of this FAD or a breach of any other obligation of confidence in favour of the provider of the Confidential Information or by any other unlawful means of which the acquirer of the confidential information is aware;
- (b) information rightfully received by the other party from a third person without a duty of confidentiality being owed by the other party to the third person, except where the other party has knowledge that the third person has obtained that information either directly or indirectly as a result of a breach of any duty of confidence owed to the first mentioned party; or
- (c) information which has been independently developed or obtained by the other party

Coordinated Capital Works Program means a planned Major Network Modernisation and Upgrade that extends across more than one exchange service area but does not include an Emergency Network Modernisation and Upgrade

Coordinated Capital Works Program Forecast has the meaning set out in clause 13.10 of Schedule 13

Coordinated Capital Works Program Schedule has the meaning set out in clause 13.14 of Schedule 13

Disclosing Party has the meaning set out in clause 11.5 in Schedule 11 of this FAD

Emergency means an emergency due to an actual or potential occurrence (such as fire, flood, storm, earthquake, explosion, accident, epidemic or war-like action) which:

- (a) endangers or threatens to endanger the safety or health of persons; or
- (b) destroys or damages, or threatens to destroy or damage property,

being an emergency which requires a significant and co-ordinated response

Emergency Network Modernisation and Upgrade means a Major Network Modernisation and Upgrade that is required and is reasonably necessary and a proportionate response to address an Emergency

Equivalent Period of Notice means a period of notice commencing at the time that the Access Provider has approved and allocated the capital expenditure or otherwise approved and made a decision to commit to a Major Network Modernisation and Upgrade

ESA means an exchange service area which is a geographic area generally serviced by a single Exchange

Exchange means a building in which telephone switching or other equipment of an Access Provider or Access Seeker has been installed for use in connection with a telecommunications network

Exemption ESA has the same meaning given to that term in the Australian Competition Tribunal's 2009 WLR, LCS and PSTN OA Individual Exemption Orders.

Expert Committee means a committee established under clause 10.11 in Schedule 10

Facility has the same meaning given to that term in section 7 of the *Telecommunications Act 1997 (Cth)*

FAD means Final Access Determination

Fault means:

- (a) a failure in the normal operation of a Network or in the delivery of a Service; or
- (b) any issue as to the availability or quality of a Service supplied to an end-user via the Access Seeker, notified by the end-user to the Access Seeker's help desk,

that has been reasonably assessed by the Access Provider as being the Access Provider's responsibility to repair

General Notification has the meaning set out in clause 13.1

Independent Auditor means a person appointed as an independent auditor in accordance with clause 11.11 of Schedule 11

Individual Notification has the meaning set out in clause 13.1 of Schedule 13

Initiating Notice has the meaning as set out in clause 10.11 of Schedule 10

LCS means local carriage service

Limitation Notice has the meaning set out in clause 16.10 of Schedule 16

Listed Carriage Service has the same meaning given to that term in section 7 of the *Telecommunications Act 1997 (Cth)*

LSS means line sharing service

Major Network Modernisation and Upgrade means a modernisation or upgrade that:

- (a) involves the installation of Telstra customer access modules closer to end-users than a Telstra exchange building;

- (b) requires the removal/relocation of the LSS or the ULLS provided from Telstra exchange buildings and the establishment of a new POI (or relocation of an existing POI) for the LSS or the ULLS, or alteration of deployment classes of equipment used on the LSS or the ULLS; or
- (c) results in a Service no longer being supplied or adversely affects the quality of that Service (or any services supplied by an Access Seeker to their end-users using the Service), but does not mean, or include, an Emergency Network Modernisation Upgrade or an national broadband network (NBN) related upgrade

MDF means a main distribution frame

MNM means managed network migration

Month means a period commencing at the beginning of any day of a named month and ending:

- (a) at the end of the day before the corresponding day of the next named month; or
- (b) if there is no such corresponding day – at the end of the next named month

National Broadband Network means a national telecommunications network for the high-speed carriage of communications, where NBN Co has been, is, or is to be, involved in the creation or development of the network. To avoid doubt, it is immaterial whether the creation or development of the network is, to any extent, attributable to:

- (a) the acquisition of assets that were used, or for use, in connection with another telecommunications network; or
- (b) the obtaining of access to assets that are also used, or for use, in connection with another telecommunications network.

NBN Co means NBN Co Limited (ACN 136 533 741), as the company exists from time to time (even if its name is later changed).

Network of a party, means that party's system, or series of systems, that carries, or is capable of carrying communications by means of guided or unguided electromagnetic energy

Non-Billing Dispute means a dispute other than a Billing Dispute

Ongoing Creditworthiness Information has the meaning as set out in clause 9.7 of Schedule 9 of this FAD

POI means point of interconnection. A point of interconnection is a physical point of interconnection in Australia between a network operated by a carrier or carriage service provider and another network operated by a service provider.

Prohibited Traffic means traffic offered across a POI for which there is no agreement between the Access Provider and the Access Seeker that the Access Provider will carry such traffic or provide a related service to the Access Seeker

Proof of Occupancy means a document that verifies occupancy by the end-user at the service address

PSTN means public switched telephone network

PSTN OA means public switched telephone network originating access service

PSTN TA means public switched telephone network terminating access service

Security means the amount and type of security provided, or required to be provided, to the Access Provider in respect of the provision by the Access Provider of Services, as set out in Schedule 9

Service means a service declared under section 152AL of the CCA

Service Qualification is a desktop process where the Access Provider checks:

- (a) the availability of the ULLS from the end user side of the customer access module to the end-user's property boundary point; and
- (b) that the use on that ULLS of the Access Seeker nominated deployment class complies with the *Network Deployment Rules* Industry Code

Suspension Event has the meaning set out in clause 14.2 of Schedule 14

Suspension Notice has the meaning set out in clause 14.2 of Schedule 14

TEBA space means Telstra Exchange Building Access space

Transfer means the transfer of a LSS to a ULLS where there is no change of service provider.

ULL means unconditioned local loop

ULLS means unconditioned local loop service

WLR means wholesale line rental service

Schedule 2 – Price terms for Line Sharing Service (LSS)

2.1. The prices for LSS for the period 1 January 2011 to 30 June 2011 are:

LSS Monthly charge per service

LSS Monthly charge per service
\$1.80

LSS single connections

LSS single connections
\$44.26 per connection

Note: These charges do not apply to connections in Band 4

Note: These charges do not apply where the line on which the LSS is connected was being used to supply a ULLS.

LSS single disconnections (where payable)

LSS single disconnections
\$39.74 per connection

Note: These charges are not payable for:

- a disconnection made pursuant to a Telstra churn process by which services can be transferred between LSS, and between LSS and DSL services, or
- any period in which the Access Seeker was participating in the Telstra LSS churn process and Telstra (Bigpond) was not participating in the Telstra LSS churn process.

LSS managed network migration (MNM) connection charges – where the service is to be connected on a line Telstra is using to supply a wholesale ADSL service

	LSS MNM connection charge
Fixed amount (per MNM)	\$143.88
Variable amount (per connection)	\$33.07

Note: These charges do not apply to MNMs in Band 4

LSS MNM minimum exchange charge

LSS minimum exchange charge
\$805.27 per exchange

Note: These charges do not apply to MNMs in Band 4

2.2. The prices for LSS for the period 1 July 2011 to 30 June 2016 are:

LSS Monthly charge per service

LSS Monthly charge per service
\$1.80

LSS single connections

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per connection	\$44.84	\$46.05	\$47.43	\$48.62	\$49.83

Note: These charges do not apply to connections in Band 4

Note: These charges do not apply where the line on which the LSS is connected was being used to supply a ULLS.

LSS single disconnections (where payable)

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per disconnection	\$40.24	\$41.35	\$42.59	\$43.65	\$44.74
LSS single connections	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per connection	\$44.84	\$46.05	\$47.43	\$48.62	\$49.83

Note: These charges are not payable for:

- a disconnection made pursuant to a Telstra churn process by which services can be transferred between LSS, and between LSS and DSL services, or
- any period in which the Access Seeker was participating in the Telstra LSS churn process and Telstra (Bigpond) was not participating in the Telstra LSS churn process.

LSS managed network migration (MNM) connection charges – where the service is to be connected on a line Telstra is using to supply a wholesale ADSL service

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Fixed amount (per MNM)	\$145.68	\$149.69	\$154.18	\$158.03	\$161.98
Variable amount (per connection)	\$33.48	\$34.40	\$35.44	\$36.32	\$37.23

Note: These charges do not apply to MNMs in Band 4

LSS MNM minimum exchange charge

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per exchange	\$815.34	\$837.76	\$862.89	\$884.46	\$906.57

Note: These charges do not apply to MNMs in Band 4

Schedule 3 – Price terms for Local Carriage Service (LCS)

3.1. The price for LCS for the period 1 January 2011 to 30 June 2011 is:

Local Calls
9.1c

3.2. The price for LCS for the period 1 July 2011 to 30 June 2016 is:

Local Calls
8.7c

Schedule 4 – Price terms for Public Switched Telephone Network Originating Access service (PSTN OA)

4.1. The prices for PSTN OA for the period 1 January 2011 to 30 June 2011 are:

	<i>Flagfall (cents per call)</i>	<i>EMOU charge (cents per minute)</i>	<i>Headline rate (cents per minute)</i>
<i>CBD</i>	0.85	0.35	0.57
<i>Metropolitan</i>	0.84	0.49	0.70
<i>Provincial</i>	0.94	0.68	0.91
<i>Rural</i>	2.06	3.66	4.18
Average	0.95	0.76	1.00

4.2. The nationally averaged price for PSTN OA for the period 1 July 2011 to 30 June 2016 is 1.0 cents per minute.

Schedule 5 – Price terms for Public Switched Telephone Network Terminating Access service (PSTN TA)

5.1. The prices for PSTN TA for the period 1 January 2011 to 30 June 2011 are:

	<i>Flagfall (cents per call)</i>	<i>EMOU charge (cents per minute)</i>	<i>Headline rate (cents per minute)</i>
<i>CBD</i>	0.85	0.35	0.57
<i>Metropolitan</i>	0.84	0.49	0.70
<i>Provincial</i>	0.94	0.68	0.91
<i>Rural</i>	2.06	3.66	4.18
Average	0.95	0.76	1.00

5.2. The nationally averaged price for PSTN TA for the period 1 July 2011 to 30 June 2016 is 1.0 cents per minute.

Schedule 6 – Price terms for Unconditioned Local Loop Service (ULLS)

6.1. The prices for ULLS for the period 1 January 2011 to 30 June 2011 are:

ULLS Monthly charges on a per service per Month basis for Bands 1, 2, 3 and 4

Band	Monthly price per service
1	\$16.00
2	\$16.00
3	\$16.00
4	\$48.00

ULLS single connection charges – in use ULLS and transfer ULLS connections

Band	Per connection
1	\$51.76
2	\$54.53
3	\$59.26

Note: No indicative price is set for the ULLS in Band 4.

Note: No indicative price is set for a Vacant ULLS connection.

Charges for ULLS MNM – involving the transfer of end user data services from a Telstra wholesale PSTN and/or ADSL service, or from a line that Telstra is using to supply a ULLS to another Access Seeker

	Charge for ULLS MNM
Fixed amount (per MNM)	\$141.73
Variable amount (per connection)	\$25.68

ULLS cancellation charges

	ULLS cancellation charge
Per service where pre-jumping has occurred	\$20.54
Where entire MNM is cancelled	\$141.73

ULLS MNM minimum exchange charge – per MNM

ULLS MNM minimum exchange charge
\$655.23 per exchange

ULLS call diversion charges for the initial connection/activation of ULLS

	ULLS call diversion charge for initial connection/activation of ULLS
Fixed amount (per ULLS call diversion)	\$9.55
Variable amount (pro rata per Month)	\$12.84

6.2. The prices for ULLS for the period 1 July 2011 to 30 June 2016 are:

ULLS Monthly charges on a per service per Month basis for Bands 1, 2, 3 and 4

Band	Monthly price per service
1	\$16.75
2	\$16.75
3	\$16.75
4	\$50.11

ULLS single connection charges – in use ULLS and transfer ULLS connections

Band	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
1	\$52.47	\$53.85	\$55.46	\$56.85	\$58.27
2	\$55.22	\$56.73	\$58.44	\$59.90	\$61.39
3	\$60.00	\$61.65	\$63.50	\$65.09	\$66.71

Note: No indicative price is set for the ULLS in Band 4.

Note: No indicative price is set for a Vacant ULLS connection.

Charges for ULLS MNM – involving the transfer of end user data services from a Telstra wholesale PSTN and/or ADSL service, or from a line that Telstra is using to supply a ULLS to another Access Seeker

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Fixed amount (per MNM)	\$143.50	\$147.44	\$151.87	\$155.66	\$159.56
Variable amount (per connection)	\$26.00	\$26.71	\$27.51	\$28.20	\$28.90

ULLS cancellation charges

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per service where pre-jumpering has occurred	\$20.80	\$21.37	\$22.01	\$22.56	\$23.12
Where entire MNM is cancelled	\$143.50	\$147.44	\$151.87	\$155.66	\$159.56

ULLS MNM minimum exchange charge – per MNM

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Per exchange	\$663.42	\$681.66	\$702.11	\$719.66	\$737.68

ULLS call diversion charges for the initial connection/activation of ULLS

	Jul 2011 – Jun 2012	Jul 2012 – Jun 2013	Jul 2013 – Jun 2014	Jul 2014 – Jun 2015	Jul 2015 – Jun 2016
Fixed amount (per ULLS call diversion)	\$9.67	\$9.94	\$10.23	\$10.49	\$10.75
Variable amount (pro rata per Month)	\$13.00	\$13.36	\$13.76	\$14.10	\$14.45

Schedule 7 – Price terms for Wholesale Line Rental service (WLR)

7.1. The price for WLR for the period 1 January 2011 to 30 June 2011 is:

Monthly price per service
\$22.10

7.2. The price for WLR for the period 1 July 2011 to 30 June 2016 is:

Monthly price per service
\$22.47

Schedule 8 – Billing and Notifications

- 8.1. The Access Seeker's liability to pay Charges for a Service to the Access Provider arises at the time the Service is supplied by the Access Provider to the Access Seeker, unless the parties agree otherwise.
- 8.2. The Access Seeker must pay Charges in accordance with this FAD, including but not limited to this Schedule 8.
- 8.3. Subject to clause 8.4, the Access Provider shall provide the Access Seeker with an invoice in respect of Charges payable for Services and associated work supplied in each billing period. A billing period shall be a period of one Month, unless the parties agree otherwise. Other charges shall be invoiced by the Access Provider at the following times:
 - (a) as stated in an applicable price list;
 - (b) as stated in any applicable billing and settlement procedures;
 - (c) as stated in or incurred under this FAD; or
 - (d) as otherwise agreed by the Access Provider and the Access Seeker or, failing agreement, at the option of the Access Provider, on completion of the relevant work or when the outstanding amount reaches \$50,000 (as the case requires).
- 8.4. As a statement of general principle, the Access Provider may invoice the Access Seeker more frequently than once a Month, where there has been a decline in the Access Seeker's creditworthiness as assessed in accordance with Schedule 9.
- 8.5. The Access Provider shall be entitled to invoice the Access Seeker for previously uninvoiced Charges or Charges which were understated in a previous invoice, provided that:
 - (a) the Charges to be retrospectively invoiced can be reasonably substantiated to the Access Seeker by the Access Provider; and
 - (b) subject to clause 8.6, no more than six Months have elapsed since the date the relevant amount was incurred by the Access Seeker's customer, except:
 - (i) where the Access Seeker gives written consent to a longer period (such consent not to be unreasonably withheld); or
 - (ii) to the extent that the Charges relate to a new Service being billed for the first time, in which case such Charges may be invoiced up to eight Months after the relevant amount was incurred by the Access Seeker's customer, subject to agreement with the Access Seeker (such agreement not to be unreasonably withheld); or

- (iii) to the extent that the Charges relate to services supplied by an overseas carrier and the Access Provider has no control over the settlement arrangements as between it and the overseas carrier, in which case the Access Provider shall invoice such amounts as soon as is reasonably practicable.
- 8.6. The parties must comply with the provisions of any applicable industry standard made by the ACMA pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) and the provisions of any applicable industry code registered pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) in relation to billing.
- 8.7. Subject to any Billing Dispute notified in accordance with this FAD, an invoice is payable in full 30 Calendar Days after the date the invoice was issued or such other date as agreed between the parties. The Access Seeker may not deduct, withhold, or set-off any amounts for accounts in credit, for counter-claims or for any other reason or attach any condition to the payment, unless otherwise agreed by the Access Provider. All amounts owing and unpaid after the due date shall incur a liability for interest at the rate per annum of the 90 day authorised dealers bank bill rate published in the *Australian Financial Review* on the first Business Day following the due date for payment, plus 2.5%.
- 8.8. In addition to charging interest in accordance with clause 8.7 or exercising any other rights the Access Provider has at law or under this FAD, where an amount is outstanding and remains unpaid for more than 20 Business Days after it is due for payment, and is not an amount subject to any Billing Dispute, the Access Provider may take action, without further notice to the Access Seeker, to recover any such amount as a debt due to the Access Provider. For the avoidance of doubt, this clause 8.8 shall be subject to the Billing Dispute Procedures.
- 8.9. Unless the parties otherwise agree, there shall be no setting-off (i.e. netting) of invoices except where a party goes into liquidation, in which case the other party may set-off. However, in order to minimise the administration and financial costs, the parties shall consider in good faith set-off procedures for inter-party invoices which may require the alignment of the parties' respective invoice dates and other procedures to allow set-off to occur efficiently.
- 8.10. The Access Provider must, at the time of issuing an invoice, provide to the Access Seeker all information reasonably required by the Access Seeker to identify and understand the nature and amount of each component of the invoice. Nothing in this clause 8.10 is intended to limit subsections 152AR(6) and 152AR(7) of the CCA.
- 8.11. If the Access Seeker believes a Billing Dispute exists, it may, by written notice to the Access Provider, invoke the Billing Dispute Procedures (**Billing Dispute Notice**). A Billing Dispute must be initiated only in good faith.

- 8.12. Except where a party seeks urgent injunctive relief, the Billing Dispute Procedures must be invoked before either party may begin legal or regulatory proceedings in relation to any Billing Dispute.
- 8.13. If a Billing Dispute Notice is given to the Access Provider by the due date for payment of the invoice containing the Charge which is being disputed, the Access Seeker may withhold payment of the disputed Charge until such time as the Billing Dispute has been resolved. Otherwise, the Access Seeker must pay the invoice in full in accordance with this FAD (but subject to the outcome of the Billing Dispute Procedures).
- 8.14. Except where payment is withheld in accordance with clause 8.13, the Access Provider is not obliged to accept a Billing Dispute Notice in relation to an invoice unless the invoice has been paid in full.
- 8.15. A Billing Dispute Notice may not be given to the Access Provider in relation to a Charge later than six Months after the due date for the invoice for the Charge issued in accordance with 8.7.
- 8.16. The Access Provider shall acknowledge receipt of a Billing Dispute Notice within two Business Days by providing the Access Seeker with a reference number.
- 8.17. Each party shall, as early as practicable after a Billing Dispute Notice, provide to the other party any relevant materials on which it intends to rely (provided that this obligation is not intended to be the same as the obligation to make discovery in litigation).
- 8.18. The Access Provider shall try to resolve any Billing Dispute as soon as practicable and in any event within 30 Business Days of receipt of a Billing Dispute Notice (or longer period if agreed by the parties), by notifying the Access Seeker in writing of its proposed resolution of a Billing Dispute. That notice shall explain the Access Provider's proposed resolution and any action to be taken by:
 - (a) the Access Provider (e.g. withdrawal, adjustment or refund of the disputed Charge); or
 - (b) the Access Seeker (e.g. payment of the disputed Charge).
- 8.19. Any withdrawal, adjustment or refund of the disputed Charge by the Access Provider or payment of the disputed Charge by the Access Seeker (as the case may be) must occur within as soon as practicable and in any event within one Month of the Access Provider's notice, unless the Access Seeker escalates the Billing Dispute under clause 8.23.
- 8.20. Where the Access Provider is to refund a disputed Charge, the Access Provider shall pay interest (at the rate set out in clause 8.7) on any refund. Interest shall accrue daily from the date on which each relevant amount to be refunded was paid to the Access Provider, until the date the refund is paid.

- 8.21. Where the Access Seeker is to pay a disputed Charge, the Access Seeker shall pay interest (at the rate set out in clause 8.7) on the amount to be paid. Interest shall accrue daily from the date on which each relevant amount was originally due to be paid to the Access Provider, until the date the amount is paid.
- 8.22. If the Access Seeker is not satisfied with the Access Provider's proposed resolution in relation to a Billing Dispute, or if the Access Provider has not provided the Access Seeker with a proposed resolution to the Billing Dispute within the timeframe set out in clause 8.18, the Access Seeker may escalate the matter under clause 8.23. If the Access Seeker does not do so within 30 Business Days of being notified of the Access Provider's proposed resolution (or a longer period if agreed by the parties), the Access Seeker shall be deemed to have accepted the Access Provider's proposed resolution and clauses 8.20 and 8.21 shall apply.
- 8.23. If the Access Seeker wishes to escalate a Billing Dispute, the Access Seeker must give the Access Provider a written notice:
- (a) stating why it does not agree with the Access Provider's proposed resolution; and
 - (b) seeking escalation of the Billing Dispute.
- 8.24. A notice under clause 8.23 must be submitted to the nominated billing manager for the Access Provider, who shall discuss how best to resolve the Billing Dispute with the Access Seeker's nominated counterpart.
- 8.25. If the escalated matter cannot be resolved under clause 8.24 within five Business Days of notice being given under clause 8.23:
- (a) either party may provide a written proposal to the other party for the appointment of a mediator to assist in resolving the dispute. Mediation shall be conducted in accordance with the mediation guidelines of the ACDC and concluded within three Months of the proposal (unless the parties agree to extend this timeframe); or
 - (b) if the parties either do not agree to proceed to mediation or are unable to resolve the entire Billing Dispute by mediation, either party may commence legal or regulatory proceedings to resolve the matter.
- 8.26. The parties shall ensure that any person appointed or required to resolve a Billing Dispute shall take into account the principle that the Access Seeker shall be entitled to be recompensed in circumstances where the Access Seeker is prevented (due to regulatory restrictions on retrospective invoicing) from recovering from its end-user an amount which is the subject of a Billing Dispute (a **Backbilling Loss**), provided that:
- (a) such principle shall apply only to the extent to which the Billing Dispute is resolved against the Access Provider; and

- (b) such principle shall apply only to the extent to which it is determined that the Backbilling Loss was due to the Access Provider unnecessarily delaying resolution of the Billing Dispute.
- 8.27. Each party must continue to fulfill its obligations under this FAD while a Billing Dispute and the Billing Dispute Procedures are pending.
- 8.28. All discussions and information relating to a Billing Dispute must be communicated or exchanged between the parties through the representatives of the parties set out in clause 8.24 (or their respective nominees).
- 8.29. There shall be a presumption that all communications between the parties during the course of a Billing Dispute are made on a without prejudice and confidential basis.
- 8.30. If it is determined by the Billing Dispute Procedures, any other dispute resolution procedure, or by agreement between the parties, that three or more out of any five consecutive invoices for a given Service are incorrect by 5% or more, then, for the purposes of clause 8.20, the interest payable by the Access Provider in respect of the overpaid amount of the invoices in question shall be the rate set out in clause 8.7, plus 2%. The remedy set out in this clause 8.30 shall be without prejudice to any other right or remedy available to the Access Seeker.
- 8.31. If three or more out of any five consecutive invoices for a given Service are incorrect by 5% or more, then without prejudice to any other right or remedy available to the Access Seeker, the Access Provider shall be deemed to have breached this FAD and the Access Seeker shall have a right to damages for such a breach.

Schedule 9 – Creditworthiness and Security

- 9.1. Unless otherwise agreed by the Access Provider, the Access Seeker must (at the Access Seeker's sole cost and expense) provide to the Access Provider and maintain, on terms and conditions reasonably required by the Access Provider and subject to clause 9.2, the Security (as shall be determined having regard to clause 9.3 and as may be varied pursuant to clause 9.4) in respect of amounts owing by the Access Seeker to the Access Provider under this FAD.
- 9.2. The Access Seeker acknowledges that unless otherwise agreed by the Access Provider, it must maintain (and the Access Provider need not release) the Security specified in clause 9.1 for a period of six Months following the last to occur of: cessation of supply of a Service or Services under this FAD, and payment of all outstanding amounts under this FAD.
- 9.3. The Security (including any varied Security) shall only be requested when it is reasonably necessary to protect the legitimate business interests of the Access Provider and shall be of an amount and in a form which is reasonable in all the circumstances. As a statement of general principle the amount of any Security shall be calculated by reference to:
- (a) the aggregate value of all Services likely to be provided to the Access Seeker under this FAD over a reasonable period; or
 - (b) the value of amounts invoiced under this FAD but unpaid (excluding any amounts in respect of which there is a current Billing Dispute).

For the avoidance of doubt, any estimates, forecasts or other statements made or provided by the Access Seeker may be used by the Access Provider in determining the amount of a Security.

- 9.4. Examples of appropriate forms of security, having regard to the factors referred to in clause 9.3, may include without limitation:
- (a) fixed and floating charges;
 - (b) personal guarantees from directors;
 - (c) bank guarantees;
 - (d) letters of comfort;
 - (e) mortgages;
 - (f) a right of set-off; or
 - (g) a combination of the forms of security referred to in paragraphs (a) to (f) above.
- 9.5. The Access Provider may from time to time where the circumstances reasonably require, request Ongoing Creditworthiness Information from the

Access Seeker to determine the ongoing creditworthiness of the Access Seeker. The Access Seeker must supply Ongoing Creditworthiness Information to the Access Provider within 15 Business Days of receipt of a request from the Access Provider for such information. The Access Provider may, as a result of such Ongoing Creditworthiness Information, having regard to the factors referred to in clause 9.3 and subject to clause 9.7, reasonably require the Access Seeker to alter the Security, and the Access Seeker must provide that altered Security within 20 Business Days of being notified by the Access Provider in writing of that requirement.

- 9.6. The Access Seeker may from time to time request the Access Provider to consent (in writing) to a decrease in the required Security and/or alteration of the form of the Security. The Access Provider must, within 15 Business Days of the Access Seeker's request, comply with that request if, and to the extent, it is reasonable to do so (having regard to the factors referred to in clause 9.3). The Access Provider may request, and the Access Seeker shall promptly provide, Ongoing Creditworthiness Information, for the purposes of this clause 9.6.
- 9.7. In the event that the Access Seeker provides Ongoing Creditworthiness Information to the Access Provider as required by this Schedule 9, the Access Seeker must warrant that such information is true, fair, accurate and complete as at the date on which it is received by the Access Provider.
- 9.8. For the purposes of this Schedule 9, **Ongoing Creditworthiness Information** means:
 - (a) a copy of the Access Seeker's most recent published audited balance sheet and published audited profit and loss statement (together with any notes attached to or intended to be read with such balance sheet or profit and loss statement);
 - (b) a credit report in respect of the Access Seeker or, where reasonably necessary in the circumstances, any of its owners or directors (Principals) from any credit reporting agency, credit provider or other independent party. The Access Seeker shall co-operate and provide any information necessary for that credit reporting agency, credit provider or other independent party to enable it to form an accurate opinion of the Access Seeker's creditworthiness. To that end, the Access Seeker agrees to procure written consents (as required under the *Privacy Act 1988* (Cth)) from such of its Principals as is reasonably necessary in the circumstances to enable the Access Provider to:
 - (i) obtain from a credit reporting agency, credit provider or other independent party, information contained in a credit report;
 - (ii) disclose to a credit reporting agency, credit provider or other independent party, personal information about each Principal; and
 - (iii) obtain and use a consumer credit report;

- (c) a letter, signed by the company secretary or duly authorised officer of the Access Seeker, stating that the Access Seeker is not insolvent and not under any external administration (as defined in the *Corporations Act 2001* (Cth)) or under any similar form of administration under any laws applicable to it in any jurisdiction; and
 - (d) the Access Seeker's credit rating, if any has been assigned to it.
- 9.9. The Access Seeker may require a confidentiality undertaking to be given by any person having access to confidential information contained in its Ongoing Creditworthiness Information prior to such information being provided to that person.
- 9.10. Subject to this Schedule 9, the Access Provider may, in its absolute discretion, deem a failure by the Access Seeker to provide Ongoing Creditworthiness Information or an altered Security in accordance with clause 9.5 as:
 - (a) an event entitling the Access Provider to alter the Security of the Access Seeker; or
 - (b) a breach of a material term or condition of this FAD.
- 9.11. Any disputes arising out of or in connection with Schedule 9 shall be dealt with in accordance with the procedures in Schedule 10.

Schedule 10 – General dispute resolution procedures

- 10.1. If a dispute arises between the parties in connection with or arising from the supply of a Service under this FAD, the dispute shall be managed as follows:
 - (a) in the case of a Billing Dispute, the dispute shall be managed in accordance with the Billing Dispute Procedures; or
 - (b) subject to clause 10.2, in the case of a Non-Billing Dispute, the dispute shall be managed in accordance with the procedures set out in this Schedule 10.
- 10.2. To the extent that a Non-Billing Dispute is raised or arises in connection with, or otherwise relates to, a Billing Dispute, then unless the Access Provider otherwise determines, that Non-Billing Dispute shall be resolved in accordance with the Billing Dispute Procedures.
- 10.3. If a Non-Billing Dispute arises, either party may, by written notice to the other, refer the Non-Billing Dispute for resolution under this Schedule 10. A Non-Billing Dispute must be initiated only in good faith.
- 10.4. Any Non-Billing Dispute notified under clause 10.3 shall be referred:
 - (a) initially to the nominated manager (or managers) for each party, who shall endeavour to resolve the dispute within 10 Business Days of the giving of the notice referred to in clause 10.3 or such other time agreed by the parties; and
 - (b) if the persons referred to in paragraph (a) above do not resolve the Non-Billing Dispute within the time specified under paragraph (a), then the parties may agree in writing within a further five Business Days to refer the Non-Billing Dispute to an Expert Committee under clause 10.11, or by written agreement submit it to mediation in accordance with clause 10.10.
- 10.5. If:
 - (a) under clause 10.4 the Non-Billing Dispute is not resolved and a written agreement is not made to refer the Non-Billing Dispute to an Expert Committee or submit it to mediation; or,
 - (b) under clause 10.10(f), the mediation is terminated; and
 - (c) after a period of five Business Days after the mediation is terminated as referred to in paragraph (b), the parties do not resolve the Non-Billing Dispute or agree in writing on an alternative procedure to resolve the Non-Billing Dispute (whether by further mediation, written notice to the Expert Committee, arbitration or otherwise) either party may terminate the operation of this dispute resolution procedure in relation to the Non-Billing Dispute by giving written notice of termination to the other party.

- 10.6. A party may not commence legal proceedings in any court or commence any arbitration (except proceedings seeking urgent interlocutory relief) in respect of a Non-Billing Dispute unless:
- (a) the Non-Billing Dispute has first been referred for resolution in accordance with the dispute resolution procedure set out in this Schedule 10 or clause 10.2 (if applicable) and a notice terminating the operation of the dispute resolution procedure has been issued under clause 10.5; or
 - (b) the other party has failed to substantially comply with the dispute resolution procedure set out in this Schedule 10 or clause 10.2 (if applicable).
- 10.7. Each party must continue to fulfill its obligations under this FAD while a Non-Billing Dispute and any dispute resolution procedure under this Schedule 10 are pending.
- 10.8. There shall be a presumption that all communications between the parties during the course of a Non-Billing Dispute are made on a without prejudice and confidential basis.
- 10.9. Each party shall, as early as practicable after the notification of a Non-Billing Dispute pursuant to clause 10.3, provide to the other party any relevant materials on which it intends to rely (provided that this obligation is not intended to be the same as the obligation to make discovery in litigation).
- 10.10. Where a Non-Billing Dispute is referred to mediation by way of written agreement between the parties, pursuant to clause 10.4(b):
- (a) any agreement shall include a statement of the disputed matters in the Non-Billing Dispute and must take place within 15 Business Days upon the receipt by the mediator of such agreement;
 - (b) it must be conducted in accordance with the mediation guidelines of the ACDC in force from time to time (**ACDC Guidelines**) and the provisions of this clause 10.10. In the event of any inconsistency between them, the provisions of this clause 10.10 shall prevail;
 - (c) it is to be conducted in private;
 - (d) in addition to the qualifications of the mediator contemplated by the ACDC Guidelines, the mediator should:
 - (i) have an understanding of the relevant aspects of the telecommunications industry (or have the capacity to quickly come to such an understanding);
 - (ii) have an appreciation of the competition law implications of his/her decisions; and
 - (iii) not be an officer, director or employee of a telecommunications company or otherwise have a potential for a conflict of interest;

- (e) the parties must notify each other no later than 48 hours prior to mediation of the names of their representatives who shall attend the mediation. Nothing in this subclause is intended to suggest that the parties are able to refuse the other's chosen representatives or to limit other representatives from the parties attending during the mediation;
- (f) it shall terminate in accordance with the ACDC Guidelines;
- (g) the parties shall bear their own costs of the mediation including the costs of any representatives and shall each bear half the costs of the mediator; and
- (h) any agreement resulting from mediation shall bind the parties on its terms.

10.11. The parties may by written agreement in accordance with clause 10.4(b), submit a Non-Billing Dispute for resolution by an Expert Committee (**Initiating Notice**), in which case the provisions of this clause 10.11 shall apply as follows:

- (a) The terms of reference of the Expert Committee shall be as agreed by the parties. If the terms of reference are not agreed within five Business Days after the date of submitting the Initiating Notice (or such longer period as agreed between the parties), the referral to the Expert Committee shall be deemed to be terminated.
- (b) An Expert Committee shall act as an expert and not as an arbitrator.
- (c) The parties shall each be represented on the Expert Committee by one appointee.
- (d) The Expert Committee must include an independent chairperson agreed by the parties or, if not agreed, a nominee of the ACDC. The chairperson must have the qualifications listed in paragraphs 10.10(d)(i), (ii) and (iii).
- (e) Each party shall be given an equal opportunity to present its submissions and make representations to the Expert Committee.
- (f) The Expert Committee may determine the dispute (including any procedural matters arising during the course of the dispute) by unanimous or majority decision.
- (g) The parties shall ensure that the Expert Committee uses all reasonable endeavours to reach a decision within 20 Business Days after the date on which the terms of reference are agreed or the final member of the Expert Committee is appointed (whichever is the later) and undertake to co-operate reasonably with the Expert Committee to achieve that timetable.

- (h) If the dispute is not resolved within the timeframe referred to in clause 10.11(g), either party may by written notice to the other party terminate the appointment of the Expert Committee.
- (i) The Expert Committee shall have the right to conduct any enquiry as it thinks fit, including the right to require and retain relevant evidence during the course of the appointment of the Expert Committee or the resolution of the dispute.
- (j) The Expert Committee must give written reasons for its decision.
- (k) A decision of the Expert Committee is final and binding on the parties except in the case of manifest error or a mistake of law.
- (l) Each party shall bear its own costs of the enquiry by the Expert Committee including the costs of its representatives, any legal counsel and its nominee on the Expert Committee and the parties shall each bear half the costs of the independent member of the Expert Committee.

Schedule 11 – Confidentiality provisions

- 11.1. Subject to clause 11.4 and any applicable statutory duty, each party must keep confidential all Confidential Information of the other party and must not:
- (a) use or copy such Confidential Information except for the purposes of this FAD; or
 - (b) disclose or communicate, cause to be disclosed or communicated or otherwise make available such Confidential Information to any third person.
- 11.2. For the avoidance of doubt, information generated within the Access Provider's Network as a result of or in connection with the supply of the relevant Service to the Access Seeker or the interconnection of the Access Provider's Network with the Access Seeker's Network (other than the aggregate Network information of the Access Provider and all Access Seekers to whom the relevant Service is supplied) is the Confidential Information of the Access Seeker.
- 11.3. The Access Provider shall upon request from the Access Seeker, disclose to the Access Seeker quarterly aggregate traffic flow information generated within the Access Provider's Network in respect of a particular Service provided to the Access Seeker, if the Access Provider measures and provides this information to itself. The Access Seeker must pay the reasonable costs of the Access Provider providing that information.
- 11.4. Subject to clause 11.5, Confidential Information of the Access Seeker:
- (a) referred to in clause 11.2; or
 - (b) relating to or concerning the Access Seeker's end-users,
- may be:
- (c) used by the Access Provider:
 - (i) for the purposes of undertaking planning, maintenance, provisioning, operations or reconfiguration of its Network;
 - (ii) for the purposes of this FAD;
 - (iii) for the purpose of billing; or
 - (iv) for another purpose agreed to by the Access Seeker; and
 - (d) disclosed only to personnel directly involved in the purposes referred to in paragraph (c) above.
- 11.5. A party (**Disclosing Party**) may to the extent necessary disclose the Confidential Information of the other party:

- (a) to those of its directors, officers, employees, agents and representatives to whom the Confidential Information is reasonably required to be disclosed for the purposes of this FAD;
- (b) to any professional person acting for the Disclosing Party to permit that person to protect or advise on the rights of the Disclosing Party in respect of the obligations of the Disclosing Party under this FAD;
- (c) to an auditor acting for the Disclosing Party to the extent necessary to permit that auditor to perform its audit functions;
- (d) in connection with legal proceedings, arbitration, expert determination and other dispute resolution mechanisms set out in this FAD or for the purpose of seeking advice from a professional person in relation thereto;
- (e) as required by law provided that the Disclosing Party has first given as much notice (in writing) as is reasonably practicable to the other party, that it is required to disclose the Confidential Information so that the other party has an opportunity to protect the confidentiality of its Confidential Information;
- (f) with the written consent of the other party provided that if required by the other party as a condition of giving its consent, the Disclosing Party must comply with clause 11.6;
- (g) in accordance with a lawful and binding directive issued by a regulatory authority which is duly authorised to do so;
- (h) if reasonably required to protect the safety of personnel or property;
- (i) as required by the listing rules of any stock exchange where that party's securities are listed or quoted; or
- (j) as reasonably required to facilitate an Access Seeker gaining access to Services (including by undertaking Common Infrastructure Works) at a particular Exchange, provided that the Disclosing Party must comply with clause 11.6.

11.6. If required by another party as a condition of giving its consent to the disclosure of the Confidential Information of that other party, or where the information is reasonably required to facilitate an Access Seeker gaining access to Services (including by undertaking Common Infrastructure Works) at a particular Exchange, the Disclosing Party, before disclosing Confidential Information to a third person, must:

- (a) impose an obligation upon the disclosee by way of a confidentiality undertaking in the form set out in Annexure 1 of this Schedule 11:
 - (i) to use the Confidential Information disclosed solely for the purposes for which the disclosure is made and to observe appropriate confidentiality requirements in relation to such information; and

- (ii) not to disclose the Confidential Information without the prior written consent of the other party;
 - (b) obtain an acknowledgment by way of a confidentiality undertaking in the form set out in Annexure 1 of this Schedule 11 from such a disclosee that:
 - (i) the Confidential Information is and at all times remains proprietary to the other party; and
 - (ii) that misuse or unauthorised disclosure of the Confidential Information may cause serious harm to the other party.
- 11.7. Each party must co-operate in any action taken by the other party to:
- (a) protect the confidentiality of the other party's Confidential Information;
or
 - (b) enforce its rights in relation to its Confidential Information.
- 11.8. Each party must establish and maintain security measures to safeguard the other party's Confidential Information from unauthorised access, use, copying, reproduction or disclosure.
- 11.9. Confidential Information provided by one party to the other party is provided for the benefit of that other party only. Each party acknowledges that no warranty is given by the Disclosing Party that the Confidential Information is or will be correct.
- 11.10. Each party acknowledges that a breach of this Schedule by one party may cause another party irreparable damage for which monetary damages would not be an adequate remedy. Accordingly, in addition to other remedies that may be available, a party may seek injunctive relief against such a breach or threatened breach of this Schedule 11.
- 11.11. If the Access Seeker believes there is *prima facie* evidence which tends to show that the Access Provider has used, is using or is likely to use Confidential Information relating to the Access Seeker's end-users for a purpose other than as permitted under clause 11.4, the Access Seeker may invoke the audit procedures set out in this clause 11.11 as follows:
- (a) The audit procedures in this clause 11.11 must be initiated only in good faith.
 - (b) The Access Seeker shall give the Access Provider a written notice that it intends to initiate an audit in accordance with this clause 11.11.
 - (c) The Access Seeker shall nominate an Independent Auditor to conduct an audit of the Access Provider's systems for the purpose of determining whether the Access Provider has used, is using or is likely to use Confidential Information relating to the Access Seeker's end-users for a purpose other than as permitted under clause 11.4.

- (d) If the Access Provider objects to the person nominated by the Access Seeker or the parties have not agreed on an Independent Auditor within five Business Days of the notice given under clause 11.11(b), then the Independent Auditor shall be a person nominated by the President for the time being of the Institute of Chartered Accountants in the state in which the Access Provider holds its registered office.
- (e) The Access Seeker shall bear all reasonable costs of the Access Provider relating to the audit, as well as the costs of the Independent Auditor.
- (f) The Independent Auditor shall be required to give a confidentiality undertaking to the Access Provider in terms as set out in Annexure 1 of this Schedule 11.
- (g) The Independent Auditor's first task shall be to determine whether there is *prima facie* evidence which tends to show that the Access Provider has used, is using or is likely to use Confidential Information relating to the Access Seeker's end-users for a purpose other than as permitted under clause 11.4. The Independent Auditor may obtain advice from a barrister or solicitor (who does not act for and has not acted for either of the parties in relation to any matter in question) in determining whether such *prima facie* evidence exists.
- (h) If the Independent Auditor so determines, then he/she shall be required to proceed with the audit.
- (i) If the Independent Auditor is required to proceed with the audit in accordance with clause 11.11(h), he/she shall be required to consult the Access Provider over the most expeditious means by which to conduct an audit of the Access Provider's systems (including but not limited to its computer systems, databases, records and processes) for the purpose specified in clause 11.11(c), and to thereafter conduct the audit as he/she considers appropriate.
- (j) The audit shall be conducted expeditiously and in any event for no longer than 20 Business Days (excluding any delays caused by the Access Provider).
- (k) The Access Provider must permit the Independent Auditor to audit and inspect its systems (including but not limited to its computer systems, databases, records and processes) and the Access Provider must provide the Independent Auditor with such assistance as he/she reasonably requires in order to conduct the audit.
- (l) At the conclusion of the audit, the Independent Auditor shall be required to provide a report to both parties setting out his/her findings and conclusions as to whether the Access Provider has used, is using or is likely to use Confidential Information relating to the Access Seeker's end-users for a purpose other than as permitted under clause 11.4.

- (m) If the Independent Auditor's report contains Confidential Information of the Access Provider, then he/she will mask such information in the version of the report provided to the Access Seeker, provided that the Access Seeker's solicitors are given an unmasked copy of the report (subject to them first giving a confidentiality undertaking to the Access Provider in terms as set out in Annexure 1 of this Schedule 11 to the FAD).
- (n) The parties acknowledge that the Independent Auditor's report shall be prima facie evidence of the matters contained in the report and (subject to any obligation of confidence attaching to the report or the information contained therein) may be used in connection with any dispute concerning whether the Access Provider has used, is using or is likely to use Confidential Information relating to the Access Seeker's end-users for a purpose other than as permitted under clause 11.4.

Confidentiality undertaking form

[Amend where necessary]

CONFIDENTIALITY UNDERTAKING

I, _____ of [employer's company name] ([**undertaking company**]) undertake to [full name of party who owns or is providing the confidential information as the case requires] ([**Provider**]) that:

- 1 Subject to the terms of this Undertaking, I will keep confidential at all times the information listed in Attachment 1 to this Undertaking (**Confidential Information**) that is in my possession, custody, power or control.
- 2 I acknowledge that:
 - (a) this Undertaking is given by me to [Provider] in consideration for [Provider] making the Confidential Information available to me for the Approved Purposes (as defined below);
 - (b) all intellectual property in or to any part of the Confidential Information is and will remain the property of [Provider]; and
 - (c) by reason of this Undertaking, no licence or right is granted to me, or any other employee, agent or representative of [undertaking company] in relation to the Confidential Information except as expressly provided in this Undertaking.
- 3 I will:
 - (a) only use the Confidential Information for:
 - (i) the purposes listed in Attachment 2 to this Undertaking; or
 - (ii) any other purpose approved by [Provider] in writing;**(the Approved Purposes);**
 - (b) comply with any reasonable request or direction from [provider] regarding the Confidential Information.
- 4 Subject to clause 5, I will not disclose any of the Confidential Information to any other person without the prior written consent of [Provider].
- 5 I acknowledge that I may disclose the Confidential Information to which I have access to:

- (a) any employee, external legal advisors, independent experts, internal legal or regulatory staff of [undertaking company], for the Approved Purposes provided that:
 - (i) the person to whom disclosure is proposed to be made (**the person**) is notified in writing to [Provider] and [Provider] has approved the person as a person who may receive the Confidential Information, which approval shall not be unreasonably withheld;
 - (ii) the person has signed a confidentiality undertaking in the form of this Undertaking or in a form otherwise acceptable to [Provider]; and
 - (iii) a signed undertaking of the person has already been served on [Provider];
- (b) if required to do so by law; and
- (c) any secretarial, administrative and support staff, who perform purely administrative tasks, and who assist me or any person referred to in paragraph 5(a) for the Approved Purpose.

6 I will establish and maintain security measures to safeguard the Confidential Information that is in my possession from unauthorised access, use, copying, reproduction or disclosure and use the same degree of care as a prudent person in my position would use to protect that person's confidential information.

7 Except as required by law and subject to paragraph 10 below, within a reasonable time after whichever of the following first occurs:

- (a) termination of this Undertaking;
- (b) my ceasing to be employed or retained by [undertaking company] (provided that I continue to have access to the Confidential Information at that time); or
- (c) my ceasing to be working for [undertaking company] in respect of the Approved Purposes (other than as a result of ceasing to be employed by [undertaking company]);

I will destroy or deliver to [Provider] the Confidential Information and any documents or things (or parts of documents or things), constituting, recording or containing any of the Confidential Information in my possession, custody, power or control.

8 Nothing in this Undertaking shall impose an obligation upon me in respect of information:

- (a) which is in the public domain; or
- (b) which has been obtained by me otherwise than from [Provider] in relation to this Undertaking;

provided that the information is in the public domain and/or has been obtained by me by reason of, or in circumstances which do not involve any breach of a confidentiality undertaking or a breach of any other obligation of confidence in favour of [Provider] or by any other unlawful means, of which I am aware.

9 I acknowledge that damages may not be a sufficient remedy for any breach of this Undertaking and that [Provider] may be entitled to specific performance or injunctive relief (as appropriate) as a remedy for any breach or threatened breach of this Undertaking, in addition to any other remedies available to [Provider] at law or in equity.

10 The obligations of confidentiality imposed by this Undertaking survive the destruction or delivery to [Provider] of the Confidential Information pursuant to paragraph 7 above.

Signed: _____ Dated: _____

Print name: _____

ATTACHMENT 1

Any document, or information in any document provided by [provider] to [undertaking company] which [provider] claims is confidential information for the purposes of this Undertaking.

ATTACHMENT 2

[Approved purpose(s)]

Schedule 12 – Communications with end users

- 12.1. The Access Provider may communicate and deal with an Access Seeker's end-users as expressly provided in clauses 12.2 to 12.4 and as otherwise permitted by law.
- 12.2. Subject to clause 12.3, the Access Provider may communicate and deal with the Access Seeker's end-users:
- (a) in relation to goods and services which the Access Provider currently supplies or previously supplied to the end-user;
 - (b) as members of the general public or a part of the general public or members of a particular class of recipients of carriage or other services;
 - (c) where the Access Provider performs wholesale operations which require communications or dealings with such end-users, to the extent necessary to carry out such operations;
 - (d) in a manner or in circumstances agreed by the parties; or
 - (e) in an Emergency, to the extent it reasonably believes necessary to protect the safety of persons or property.
- 12.3. If:
- (a) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Seeker, the Access Provider must:
 - (i) advise the end-user that they should discuss any matter concerning the Access Seeker's goods and/or services with the Access Seeker; and
 - (ii) not engage in any form of marketing or discussion of the Access Provider's goods and/or services;
 - (b) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Provider, the Access Provider may engage in any form of marketing or discussion of the Access Provider's goods and/or services; and
 - (c) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Provider and the Access Seeker, the Access Provider must advise the end-user that they should discuss any matter concerning the Access Seeker's goods and/or services with the Access Seeker, but may otherwise engage in any form of marketing or discussion of the Access Provider's goods and/or services.

- 12.4. Where a party communicates with the end-user of the other party, that first mentioned party must, where practicable, make and maintain records of that communication with the other party's end-user in circumstances where that communication discusses anything concerning the other party's goods or services with the end-user. For the avoidance of doubt, the obligation in this paragraph does not include a requirement to provide such records to the other party (however such a requirement may arise pursuant to any dispute resolution procedure).
- 12.5. For the purposes of clauses 12.2 to 12.4, a "communication" shall include any form of communication, including without limitation telephone discussions and correspondence.
- 12.6. Neither party may represent that:
- (a) it has any special relationship with or special arrangements with the other party;
 - (b) there are consequences for an end-user when an end-user signs an authority to transfer their accounts or services;
 - (c) a Service has any characteristics or functionality other than as specified in a relevant standard form of agreement or the service description for the Service or in any specifications, collateral or brochures published in relation to the Service; or
 - (d) the other party participates in the provision of the first mentioned party's services, provided that a party may, upon enquiry by an end-user, inform the end-user of the nature of its relationship with the other party.
- 12.7. Where a party communicates with an end-user of either party, the first mentioned party shall ensure that it does not attribute to the other party:
- (a) blame for a Fault or other circumstance; or
 - (b) the need for maintenance of a Network; or
 - (c) the suspension of a Service,
- provided that this requirement does not require a party to engage in unethical, misleading or deceptive conduct.
- 12.8. This Schedule 12 shall be subject to any applicable industry standard made by the ACMA pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) and any applicable industry code registered pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) in relation to communications or dealings with end-users.

Schedule 13 – Network modernisation and upgrade provisions

Notice to be provided where Access Provider undertakes a Major Network Modernisation and Upgrade

13.1. Except were the parties agree otherwise, the Access Provider may make a Major Network Modernisation and Upgrade by:

- (a) providing the Access Seeker with notices in writing in accordance with clauses 13.2 and 13.4 (**General Notification**) and clauses 13.3 and 13.5 (**Individual Notification**); and
- (b) consulting with the Access Seeker, and negotiating in good faith, any reasonable concerns of the Access Seeker, in relation to the Major Network Modernisation and Upgrade.

This clause 13.1 does not apply to an Emergency Network Modernisation and Upgrade.

13.2. The period of notices given under a General Notification provided by the Access Provider to the Access Seeker:

- (a) must be an Equivalent Period of Notice; and
- (b) in any event, must not be less than 30 weeks before the Major Network Modernisation and Upgrade is scheduled to take effect.

13.3. An Individual Notification must be provided by the Access Provider to the Access Seeker as soon as practicable after the General Notification, but, in any event, not less than 26 weeks prior to the anticipated commencement date of the Major Network Modernisation and Upgrade.

Information to be provided in the notices

13.4. A General Notification must include information on:

- (a) the ESA affected by the proposed Major Network Modernisation and Upgrade;
- (b) the distribution area affected by the proposed Major Network Modernisation and Upgrade; and
- (c) a general description of the proposed Major Network Modernisation and Upgrade, including the indicative timing for the implementation of the Major Network Modernisation and Upgrade.

13.5. An Individual Notification must include the following information in addition to the information provided in the relevant General Notification:

- (a) the anticipated commencement date for implementing the Major Network Modernisation and Upgrade;
 - (b) details of the Access Seeker's activated Services, or Services in the process of being activated at the date of the notice, that are likely to be affected by the Major Network Modernisation and Upgrade;
 - (c) the likely action required by the Access Seeker as a result of the Major Network Modernisation and Upgrade (including the possible impact of the Major Network Modernisation and Upgrade upon the Access Seeker's Services); and
 - (d) details of who the Access Seeker may contact to obtain further information about the Major Network Modernisation and Upgrade.
- 13.6. An Individual Notification only needs to be given where a Service has been activated or the Access Provider is in the process of activating a service as at the date of the Individual Notification, and:
- (a) the Major Network Modernisation and Upgrade will require the Access Seeker to take particular action in order to continue to use the Service; or
 - (b) the Major Network Modernisation and Upgrade will result in the Service no longer being supplied.
- 13.7. Where the Access Provider has provided the Access Seeker with an Individual Notification, the Access Provider must provide the Access Seeker with:
- (a) updates about the Major Network Modernisation and Upgrade covered by the notice, including:
 - (i) any update or change to the information provided in the Individual Notification;
 - (ii) any new information available at the time of the update about:
 1. services provided by the Access Provider in the relevant ESA that may be available to the Access Seeker;
 2. how the Access Seeker may be impacted by the Major Network Modernisation and Upgrade; and
 3. what steps the Access Seeker will be required to take to facilitate the Major Network Modernisation and Upgrade; and
 - (b) weekly reports about the anticipated cutover dates for the Access Seeker's affected services, beginning no less than five weeks prior to the anticipated commencement date for the Major Network Modernisation and Upgrade.

- 13.8. The updates referred to in subclause 13.7(a) are to be provided regularly (which is not required to be any more frequently than Monthly) after the Individual Notification.

Emergency Network Modernisation and Upgrade

- 13.9. In the event of an Emergency, the Access Provider may conduct an Emergency Network Modernisation and Upgrade, and
- (a) will use its best endeavours to provide the Access Seeker with an Individual Notification prior to the Emergency Network Modernisation and Upgrade being implemented; or
 - (b) where it is not practicable for prior notice to be given, the Access Provider will provide the Access Seeker with an Individual Notification as soon as reasonably practicable after the Emergency Network Modernisation and Upgrade is implemented.

Coordinated Capital Works Program forecast

- 13.10. The Access Provider must provide the Access Seeker with a written three year Coordinated Capital Works Program forecast in accordance with clause 13.11 14 Calendar Days from the date this Schedule 13 of the FAD takes effect between the parties (**Coordinated Capital Works Program Forecast**).
- 13.11. The Coordinated Capital Works Program Forecast will:
- (a) be for the three year period commencing on the date the forecast is provided;
 - (b) describe generally the Access Provider's indicative investment plans (as at the date of the forecast) for its Coordinated Capital Works Program over the next three years;
 - (c) include an evaluation of the impact that the Access Provider's indicative investment plans may have on individual ESAs areas and distribution areas; and
 - (d) specify anticipated timeframes for implementation.
- 13.12. The Access Provider must update the Coordinated Capital Works Program Forecast (and provided the update forecasts in writing to the Access Seeker) regularly, at not less than six Month intervals.
- 13.13. At the same time as the Access Provider provides a Coordinated Capital Works Program Forecast under clause 13.10, the Access Provider must provide a copy of the Coordinated Capital Works Program Forecast to the ACCC.

Coordinated Capital Works Program Schedule

- 13.14. The Access Provider must provide a written Coordinated Capital Works Program schedule to the Access Seeker by giving notice not less than 12 Months before the anticipated commencement date of the Coordinated Capital Works Program in accordance with clause 13.15 (**Coordinated Capital Works Program Schedule**).
- 13.15. The Access Provider must provide the Coordinated Capital Works Program Schedule and make its best endeavours to identify:
- (a) the ESAs and distribution areas affected;
 - (b) the Access Provider's plan for the Coordinated Capital Works Program for each ESA;
 - (c) the Access Seeker's Service(s) in that Exchange that will be affected and the expected impact of the Coordinated Capital Works Program on the Access Seeker's Service(s); and
 - (d) the anticipated timeframe for the implementation of the Coordinated Capital Works Program.
- 13.16. At the same time as the Access Provider provides a Coordinated Capital Works Program Schedule under clause 13.14, the Access Provider must provide a copy of the Coordinated Capital Works Program Schedule to the ACCC.
- 13.17. For the avoidance of doubt, the Access Provider must also comply with clauses 13.1-13.8 when complying with clauses 13.10-13.16.

Negotiations in good faith

- 13.18. Except where the parties agree otherwise, the Access Provider must not commence implementation of a Major Network Modernisation and Upgrade unless:
- (a) it complies with clauses 13.1 to 13.8; and
 - (b) it has consulted with the Access Seeker and has negotiated in good faith, and addressed the reasonable concerns of the Access Seeker in relation to the Major Network Modernisation and Upgrade.
- 13.19. Except where the parties agree otherwise, the Access Provider must not commence the implementation of a Coordinated Capital Works Program unless:
- (a) it complies with clauses 13.14 to 13.16; and
 - (b) it has consulted with the Access Seeker and has negotiated in good faith, and addressed the reasonable concerns of the Access Seeker in relation to the Major Network Modernisation and Upgrade.

13.20. Notwithstanding any continuing negotiations between the Access Provider and the Access Seeker pursuant to clauses 13.1, 13.18 and 13.19, if the Access Provider has complied with this Schedule 13, a Major Network Modernisation and Upgrade may proceed 26 weeks after an Individual Notification has been issued, unless both parties agree otherwise.

13.21. In attempting to reach a mutually acceptable resolution in relation to a variation under clauses 13.1, 13.18 and 13.19, the parties must recognise any need that the Access Provider may have to ensure that the specifications for the Services which the Access Providers supplies to more than one of its customers need to be consistent (including, without limitation having regard to the incorporation by the Access Provider of any relevant international standards).

Dispute Resolution

13.22. If a dispute arises in relation to a Major Network Modernisation and Upgrade, then the matter may be resolved in accordance with the dispute resolution procedures set out in Schedule 10 of this FAD.

Application

13.23. This Schedule 13 commences 21 Calendar Days after the day this FAD is published by the ACCC.

Miscellaneous

13.24. A requirement for the Access Provider to provide information in written form includes provision of that information in electronic form.

13.25. Any information provided by the Access Provider in electronic form must be in a text-searchable and readable format.

Schedule 14 – Suspension and termination

14.1. The Access Provider may immediately suspend the supply of a Service or access to the Access Provider's Network, provided it notifies the Access Seeker where practicable and provides the Access Seeker with as much notice as is reasonably practicable:

- (a) during an Emergency; or
- (b) where in the reasonable opinion of the Access Provider, the supply of that Service or access to the Access Provider's Network may pose a threat to safety of persons, hazard to equipment, threat to Network security or is likely to impede the activities of authorised persons responding to an Emergency; or
- (c) where, in the reasonable opinion of the Access Provider, the Access Seeker's Network or equipment adversely affects or threatens to affect the normal operation of the Access Provider's Network or access to the Access Provider's Network or equipment (including for the avoidance of doubt, where the Access Seeker has delivered Prohibited Traffic onto the Access Provider's Network),

and is entitled to continue such suspension until (as the case requires) the relevant Emergency or threat has passed or until the normal operation of the Access Provider's Network or access to the Access Provider's Network or equipment is no longer adversely affected or threatened.

14.2. If:

- (a) the Access Seeker has failed to pay monies owing under this FAD;
- (b) the Access Seeker's use either of its Facilities or the Access Provider's Facilities is in contravention of any law;
- (c) the Access Seeker breaches a material obligation under this FAD; or
- (d) any of the events described in clause 14.8 occurs in respect of the Access Seeker,

(Suspension Event) and:

- (e) within 20 Business Days after becoming aware of the Suspension Event, the Access Provider gives a written notice to the Access Seeker:
 - (i) citing this clause;
 - (ii) specifying the Suspension Event and the Service in respect of which the event has occurred;
 - (iii) requiring the Access Seeker to institute remedial action (if any) in respect of that event; and

- (iv) specifying the action which may follow due to a failure to comply with the notice,

(Suspension Notice) and:

- (f) the Access Seeker fails to institute remedial action as specified in the Suspension Notice within 20 Business Days after receiving the Suspension Notice (in this clause 14.2, the **Remedy Period**),

the Access Provider may, by written notice given to the Access Seeker within 20 Business Days after the expiry of the Remedy Period:

- (g) refuse to provide the Access Seeker with the Service:
 - (i) of the kind in respect of which the Suspension Event has occurred; and
 - (ii) a request for which is made by the Access Seeker after the date of the breach,

until the remedial action specified in the Suspension Notice is completed or the Suspension Event otherwise ceases to exist; and

- (h) suspend the provision of any Service of the kind in respect of which the Suspension Event has occurred, until the remedial action specified in the Suspension Notice is completed.

14.3. For the avoidance of doubt, subclause 14.2(a) does not apply to a Billing Dispute that has been notified by the Access Seeker.

14.4. In the case of a suspension pursuant to clause 14.2, the Access Provider shall reconnect the Access Seeker to the Access Provider's Network and recommence the supply of any suspended Services as soon as practicable after there no longer exists a reason for suspension and the Access Provider shall do so subject to payment by the Access Seeker of the Access Provider's reasonable costs of suspension and reconnection.

14.5. If:

- (a) a party ceases to be a carrier or carriage service provider; or
- (b) a party ceases to carry on business for a period of more than 10 consecutive Business Days without the prior written consent of the other party (such consent not to be unreasonably withheld); or
- (c) in the case of the Access Seeker, any of the reasonable grounds specified in subsection 152AR(9) of the CCA apply; or
- (d) a party breaches a material obligation under this FAD, and:

- (i) that breach materially impairs or is likely to materially impair the ability of the other party to deliver Listed Carriage Services to its customers; and
- (ii) the other party has given a written notice to the first-mentioned party within 20 Business Days of becoming aware of the breach (**Breach Notice**); and
- (iii) the other party fails to institute remedial action as specified in the Breach Notice within 20 Business Days after receiving the Breach Notice (in this clause 14.5, the **Remedy Period**),

the other party may cease supply of the Service(s) under this FAD by written notice given to the first-mentioned party within 20 Business Days after becoming aware of the cessation, reasonable grounds or expiry of the Remedy Period specified in the Breach Notice (as the case may be).

- 14.6. A party must not give the other party both a Suspension Notice under clause 14.2 and a Breach Notice under clause 14.5 in respect of:
- (a) the same breach; or
 - (b) different breaches that relate to or arise from the same act, omission or event or related acts, omissions or events,

except where a Suspension Notice has previously been given to the Access Seeker by the Access Provider in accordance with clause 14.2 in respect of a Suspension Event and the Suspension Event has not been rectified by the Access Seeker within the relevant Remedy Period specified in clause 14.2.

- 14.7. For the avoidance of doubt, a party shall not be required to provide a Suspension Notice under clause 14.2 in respect of a breach before giving a Breach Notice in respect of that breach under clause 14.5.

- 14.8. Notwithstanding any other provision of this FAD, either party may at any time immediately cease the supply of one or more Services under this FAD by giving written notice of termination to the other party if:

- (a) an order is made or an effective resolution is passed for winding up or dissolution without winding up (otherwise than for the purposes of solvent reconstruction or amalgamation) of the other party and the order or resolution remains in effect for a continuous period of five Business Days; or
- (b) a receiver, receiver and manager, official manager, controller, administrator (whether voluntary or otherwise), provisional liquidator, liquidator, or like official is appointed over the whole or a substantial part of the undertaking and property of the other party and the appointment remains in effect for a continuous period of five Business Days; or

- (c) a holder of an encumbrance takes possession of the whole or any substantial part of the undertaking and property of the other party, or the other party enters or proposes to enter into any scheme of arrangement or any composition for the benefit of its creditors; or
- (d) the other party is or likely to be unable to pay its debts as and when they fall due or is deemed to be unable to pay its debts pursuant to section 585 or any other section of the *Corporations Act 2001* (Cth); or
- (e) as a result of the operation of section 459F or any other section of the *Corporations Act 2001* (Cth), the other party is taken to have failed to comply with a statutory demand; or
- (f) a force majeure event substantially and adversely affecting the ability of a party to perform its obligations to the other party, continues for a period of three Months; or
- (g) the other party breaches any of the terms of any of its loans, security or like agreements or any lease or agreement relating to significant equipment used in conjunction with the business of that other party related to the supply of a Service under this FAD; or
- (h) the other party seeks or is granted protection from its creditors under any applicable legislation; or
- (i) anything analogous or having a substantially similar effect to any of the events specified above occurs in relation to the other party.

14.9. The cessation of the operation of this FAD:

- (a) shall not operate as a waiver of any breach by a party of any of the provisions of the FAD; and
- (b) is without prejudice to any rights, liabilities or obligations of any party which have accrued up to the date of cessation.

14.10. Without prejudice to the parties' rights upon termination of the supply of a Service under this FAD, or expiry or revocation of this FAD, the Access Provider must refund to the Access Seeker a fair and equitable proportion of those sums paid under this FAD by the Access Seeker which are periodic in nature and have been paid for a Service for a period extending beyond the date on which the supply of a Service under this FAD terminates, or this FAD ceases to have effect, subject to any invoices or other amounts outstanding from the Access Seeker to the Access Provider. In the event of a dispute in relation to the calculation or quantum of a fair and equitable proportion, either party may refer the matter for dispute resolution in accordance with the dispute resolution procedures set out in Schedule 10 of this FAD.

Schedule 15 – Changes to operating manuals

15.1. Operational documents concerning the ULLS may be amended:

- (a) by the Access Provider from time to time to implement or reflect a change to its standard processes, subject to:
 - (i) giving 20 Business Days prior written notice to the Access Seeker including a documented list of all amendments, and a marked-up copy of the proposed new operational document that clearly identifies all amendments; and
 - (ii) allowing the Access Seeker to provide comments during the notice period on the proposed amendments, and giving reasonable consideration to any comments which the Access Seeker has made on the proposed amendments; and
- (b) otherwise, by agreement of the parties.

Note: operational documents concerning the ULLS include (i) *The Telstra Operations and Maintenance Manual Part 16 Fault Management Procedures for Telstra Unconditioned Local Loop Service*; and (ii) *The Telstra Ordering and Provisioning Manual Part 16 Telstra Unconditioned Local Loop Service Operations Manual and any replacement document*

15.2. Upon completion of the process set out in clause 15.1, the Access Provider must give the Access Seeker a copy of the new operational document.

15.3. Where operational documents concerning the ULLS are amended in accordance with clause 15.1 and the Access Seeker believes that the amendments:

- (a) are unreasonable; or
- (b) deprive the Access Seeker of a fundamental part of its rights contained in this FAD;

the Access Seeker may seek to have the matter resolved in accordance with the dispute resolution procedures set out in Schedule 10 of this FAD.

Schedule 16 – Ordering and provisioning

Provisions to apply to Managed Network Migrations (MNM) to the ULLS and the LSS

Minimum number of services

- 16.1. Except where the parties agree otherwise, it is at the discretion of the Access Seeker whether a particular Service is to be connected as part of a MNM, or outside of a MNM.
- 16.2. The Access Seeker will notify the Access Provider at the time the order is made whether a particular Service is to be connected as part of a MNM or outside of a MNM.
- 16.3. Except where the parties agree otherwise, there is no minimum number of services required as a pre-requisite for requesting an MNM.

Migration plan terms (forecasting timeframes)

- 16.4. Unless the parties agree otherwise, the period of notice that an Access Seeker must give for an MNM is 56 Calendar Days.
- 16.5. Subject to clause 16.6, the Access Provider must not cancel an MNM where the number of Services to be cutover as specified in the 20 Business Day forecast differs to the number of Services specified in the 56 Calendar Day forecast.
- 16.6. If the cutover of Services cannot occur within the 56 Calendar Day forecast period because of a significant variation between the 56 Calendar Day forecast and the 20 Business Day forecast, the Access provider must to take all reasonable steps to ensure that cutover occurs as soon as practicable following the conclusion of that period.
- 16.7. For the purpose of this determination a reference to a significant variation refers to a variation of more than 10 per cent of the MNM forecast.

Note: For instance the cutover may not occur because of a significant variation between the 56 Calendar Day forecast and the 20 Business Day forecasts

Connections outside Business Hours

- 16.8. Except where the parties agree otherwise, it is at the discretion of the Access Seeker whether a particular Service is to be connected within Business Hours or outside of Business Hours.

Note: additional charges may be payable for work done outside of Business Hours.

Limits on number of exchanges per state per day at which MNM cutovers can be scheduled

- 16.9. Except where the parties otherwise agree, and subject to clause 16.10, the Access Provider must not refuse to schedule a cutover for an MNM at an Exchange because the Access Seeker has requested an MNM cutover at another Exchange or other Exchanges in that state on the same day.
- 16.10. The Access Provider may refuse a requested MNM cutover date where it would be inconsistent with a capacity limitation notice (**Limitation Notice**) it has published.
- 16.11. The Limitation Notice must specify:
- (a) the limit that is to apply;
 - (b) the period and the ESAs to which it applies; and
 - (c) the reasons for the limit being necessary by reference to forecast demand and available capacity.
- 16.12. The Limitation Notice lapses 60 Calendar Days after it is published, unless withdrawn earlier.
- Note: Another Limitation Notice may be issued to replace a lapsed notice.
- 16.13. The Access Provider must not unreasonably refuse to vary or withdraw the Limitation Notice on the request of an Access Seeker.
- 16.14. Where an Access Seeker disagrees with a decision made by the Access Provider not to vary or withdraw the Limitation Notice, the Access Seeker may seek dispute resolution in accordance with the dispute resolution procedures set out in Schedule 10 of this FAD.

Capacity Limits on ULLS provisioning

- 16.15. Except where the parties otherwise agree, and subject to clause 16.16, the Access Provider must not unreasonably limit the number of Services that can be provisioned per day at a particular Exchange and must use its best endeavors to supply all requested cutovers for a particular day.
- 16.16. The Access Provider may refuse a requested cutover for a Service at a particular Exchange where it is not reasonably able to perform the cutover on that day having regard to the volume of work orders, for that Exchange or for all Exchanges, and the labour that is available on that day, subject to the Access Provider performing the cutover the following Business Day.

Advice regarding Complex Services affecting ULLS orders

- 16.17. Except where the parties agree otherwise, where:
- (a) an Access Seeker has submitted a ULLS request; and
 - (b) the Service Qualification query fails due to the presence of Complex Services on the line,

the Access Provider will provide to the Access Seeker a list of the Complex Services present on the line at the time it advises the Access Seeker of the results of the Service Qualification query.

New ULLS ordering and provisioning processes

LSS to ULLS Transfer processes

Scope

16.18. Except where the parties subsequently agree otherwise, clauses 16.18 to 16.23 apply where an Access Seeker requests the Transfer of a LSS to a ULLS from the Access Provider.

Terms

16.19. The Access Seeker must provide instructions about whether or not the Transfer should occur as part of a MNM in accordance with the MNM forecasting timeframes and notice periods specified in clauses 16.4 to 16.7 of this FAD, or as otherwise agreed between the parties.

16.20. The Access Provider must take all reasonable efforts to comply with the Access Seekers instructions provided pursuant to clause 16.19.

16.21. Both the Access Provider and the Access Seeker must allow for the Transfer of the LSS to ULLS in accordance with the following minimum characteristics:

- (a) the period in which a LSS to ULLS Transfer is performed (that is, the period in which a LSS is disconnected and a ULLS is connected) will be no longer than four hours;
- (b) a Transfer must not require end-user involvement with the Access Provider (including, without limitation, the making of a telephone call or sending of correspondence by the end-user to the Access Provider). A request for a LSS to ULLS Transfer will be deemed a cancellation of any existing PSTN line rental and LSS provided the Access Seeker has obtained the necessary customer authority for the cancellation of end-user PSTN services;
- (c) a Transfer is commenced and executed by a single provisioning order from the Access Seeker to the Access Provider; and
- (d) the Access Provider will charge the Access Seeker a single charge for undertaking a LSS to ULLS Transfer whether the Transfer occurs as a single connection or as part of an MNM.

16.22. The Access Provider must ensure that the development and implementation of the LSS to ULLS Transfer process will result in no changes to how the Access Seeker currently interfaces to the ULLS Carrier Interface System (ULLCIS).

Application

16.23. Clauses 16.19 to 16.22 commence on 15 September 2011, unless a prescribed LSS to ULLS Transfer process is established on an earlier date by the Access Provider, in which case clauses 16.19 to 16.22 commence on the date the prescribed LSS to ULLS Migration process is established by the Access Provider.

Note: The commencement date of this clause aligns with similar provisions contained in final determinations between Telstra and a number of Access Seekers in the context of access disputes involving the ULLS. Some of these final determinations have been published by the ACCC and are available on its website.

See: <http://www.accc.gov.au/content/index.phtml?itemId=793062>

Connect Outstanding process for ULLS orders

16.24. Except where the parties agree otherwise, the Access Provider will support a Connect Outstanding process for the ULLS, by no later than six Months from the Commencement Date.

16.25. The Connect Outstanding process for the ULLS must:

- (a) support the cancellation of an existing service on a line upon the Access Provider receiving Proof of Occupancy; and,
- (b) facilitate the connection of a ULLS in response to a ULLS request submitted by an Access Seeker in respect of that line.